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Adapted to the wants of the people of the Mississippi Valley.

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The Valley Farmer,

OUR JANUARY NUMBER is exhausted, and in furnishing new subscribers we send all except it. We shall reprint this number shortly, when we will send it on to all who have not received it. Thanks to our good friends who have exerted themselves so assiduously to extend the circulation of our paper.

TRANSPPOSITION.—The reader will perceive that, in making up one of our forms the matter of the 218th and 219th pages was transposed.

CASTOR BEANS.—We invite attention to the article in this issue in regard to the prospects for a market for this bean. We have all along cautioned the farmers against placing much dependence upon it as a permanent crop. The market is easily overstocked, and we do not think there can be much increase in the demand for the oil. It is said that it may be used for burning, and that it may be clarified so as to be applicable to many other purposes; but we doubt whether it will very soon come into use for such purposes.

FARMERS! A time of all absorbing political interest is approaching, but do not let the meshes and mazes of political matters so completely environ and overwhelm you, as to cause you to forget your own interests and the interests of your brother farmers. We care little whether you are Whigs or Democrats, Benton men, Anti-Benton men, Fillmore men, Scott men, Douglas men, or Cass men, but we want you all to be farmer men, and to see to

it that every man you vote for is in favor of the elevation of the farmer. Of course every candidate will tell you he is in favor of the farmer—Oh, yes, he'll do any thing for the farmer. He loves the real, hard-fisted yeomanry of the land—the bone and sinew, and he'll always be as he always has been, their sincere friend. But all this kind of talk is not enough. Ask him if he will favor the establishment of a State Board of Agriculture; of an appropriation to encourage the organization of County Societies; and if he will use his efforts to establish a system of agricultural education all over our land. These things are of vital importance to every farmer, and we conjure you, as you value your interests, to keep these things constantly 'before the people.'

THE LEGISLATURE OF ILLINOIS meets in called session the first Monday in June. We understand that there will be strong effort made to push Prof. Turner's plan for an Industrial School or University through; and for our part we hope it may succeed. Illinois is now on the high road to prosperity. Her prospect is fair to become the first of Western States in prosperity and progress. Her public works are rousing up the energies of her citizens and attracting thousands of people to her limits. Now why cannot she be the first in the great revolution which is to bring about a new era for the working classes. Let her lead off in this good work, and just so sure as her bright example in projecting and constructing those noble thoroughfares which are doing so much for her posterity will be followed by the neighboring States, so sure is it that in this too they will cheerfully acknowledge her leadership and copy her example.

Boone County.

We publish with pleasure the proceedings of the farmer's meeting in Boone County, and we do most sincerely hope that the example of this county will be followed all over the State. We know that the subject has been agitated in many other counties, and we hail it as a good omen for the cause of agriculture. Why is it that we are so far behind the farmers of other States? Not because the soil of Missouri is not as good as the best, or its natural advantages as great, or its inhabitants as enterprising, ambitious, or competent—but because they fail to act in concert; because they have made no combined efforts for mutual improvement and benefit; because they have received no assistance from Legislative enactments and voluntary organizations; because they have not been brought in contact with each other in such a way as to bring out their latent energies, inspire their self confidence, and stimulate their spirit of emulation. See what has been done in New York, in Maryland, in Virginia—nay, look nearer home, and see what is now doing in Ohio, in Indiana, and in Michigan—and let us take courage, and resolve no longer to be behind our brethren of other States; that the genius of improvement shall not stop in his career on the eastern bank of the 'Father of Waters,' but that he shall cross this Rubicon, and on our broad prairies and luxuriant bottoms achieve the choicest victories that have crowned his brow with laurel wreaths.

It will be seen that the meeting in Boone stands adjourned to the first Saturday in June, and we hope on that occasion there will be a general turn out of the farmers of that prosperous county. Boone county contains some choice spirits, and we trust they will wake up such a spirit of enthusiasm on this subject as shall tell in great and good results. We hope to be there ourself on that day and most sincerely do we desire to see every farmer in the county present also:

AGRICULTURAL SOCIETY—FARMERS' MEETING. At a very respectable meeting of the farmers of Boone county in the Court House in Columbia on Monday, May 3d, 1852, Maj. JAMES S. ROLLINS was called to the Chair, and Wm. F. SWITZLER chosen Secretary.

The object of the meeting, in an able and

interesting speech from Maj. Rollins, was explained to be the formation of an Agricultural Society, whereupon the following resolutions were offered by A. W. Turner, Esq.:

1. *Resolved*, That a Society be formed by the name of 'The Boone County Agricultural and Mechanical Association.'

2. That a Committee of three be appointed to draft a constitution and by-laws for the organization and government of said Society, and that said Committee report the same to a meeting to be held in Columbia on the 1st Saturday of June, 1852.

3. That every person favorable to said Society take down the signatures and subscriptions of all persons who wish to join said Society, and report the same to the meeting to be held on the 1st Saturday in June.

4. That a Committee of five be appointed to prepare an address to the citizens of the State of Missouri, urging the propriety of organizing Agricultural Societies in every county, and requesting their co-operation in petitioning the next Legislature for such encouragement as the Agricultural interest of the State requires, and that said Committee report the address for the action of the next meeting.

5. That the payment of \$5 be the sum necessary to constitute a member for one year.

Messrs. Garey and McClanahan spoke in favor of making the fee for membership \$2 50.

Messrs. Turner, Young and Switzler were for \$5, which being put to a vote of the meeting, prevailed.

All of the above resolutions were adopted, save the third for which the following substitute was offered by W. F. Switzler, and passed.

Resolved, That a Committee in each township be appointed by the Chairman to solicit subscriptions of membership in said Society.

The following Committees were announced by the Chair:

On Constitution and By-Laws—A. W. Turner, Th. Jenkins and W. F. Switzler.

TO SOLICIT MEMBERS.

Columbia Township—J. H. McNeil, Jef. Garth, H. Keene, S. Kennon, and D. Gordon.

Rocky Fork Township—M. G. Singleton, W. W. Stone, W. W. Tucker and A. Hicks.

Missouri Township—Ishmael Vanhorn, Travis Burruss, Dr. Wm. McClure.

Perche Township—H. Lamme, Robert Schooling, Stephen Wilhite, Abram Davenport.

Cedar Township—James I. Hickman, James McConathy, sen., Micheal Fisher, E. E. Bass, W. L. Woolfolk.

Committee on Address—T. M. Allen, Prof. G. C. Swallow, E. C. Davis, Price R. Parks, John Machir.

On motion of Col. Young it was

Resolved, That the Secretary of this meet-

ing take down the names of such persons present as desire to become members of the Society.

The following persons presented their names as members:

Th. Jenkins, Wm. F. Switzler, J. B. Gordon, A. W. Turner, J. H. McNeil, S. Kennon, Wm. A. Victor, J. I. Hickman, L. T. Smith, D. Gordon, E. C. Davis, J. S. Rollins, H. D. English, J. S. Johnson, J. McConathy, E. E. Bass, Thomas M. Allen, W. T. Hickman, N. W. Wilson, G. G. Schoolfield, J. A. Boulton, J. W. Parker, W. H. Allen, D. H. Dickman, W. A. Harris, W. W. Stone, J. Garth, G. T. Swallow, M. Fisher, James Harris, S. A. Peters, H. Keene, John Machir—34

Most of the the meeting had retired before names were called for, otherwise the number of subscribers would have been much larger.

Prof. Swallow, on motion of Mr. Davis, being requested to address the meeting, did so in a very interesting manner—showing, briefly the intimate relations subsisting between the sciences of Chemistry, Botany and Mineralogy and the science of Agriculture.

On motion the meeting adjourned to half after one o'clock Saturday June 5th.

J. S. ROLLINS, Ch'n.

W. F. SWITZLER, Sec'y.

The meeting at the Court House on Monday last to adopt measures preparatory to the organization of an Agricultural and Mechanical Society was quite respectable, both in point of numbers and spirit. Maj. J. S. ROLLINS presided, and introduced the business of the occasion by a capital speech—urging upon the farmers and mechanics of the county the propriety of co-operating with each other in the promotion of their respective interests.

The proposition to organize an association of the character mentioned met with general favor; and we were glad to see our farmers and mechanics come up zealously to the work and give it an impetus, at the start, which ensures success.

For more specific information of what was done at the meeting we refer our readers to the official proceedings in another column, hoping that the farmers and mechanics of other counties in the State, commendably alive to their own interests, will at once meet and form similar associations.

The meeting on Monday adjourned to meet again at half past one o'clock on Saturday, June 5th, at which time important reports will be made from committees. We hope to see the farmers and mechanics out in full force on the occasion.—*Columbia Statesman*.

UNCLE SAM'S FARM.—The following table which we find in a recent speech in Congress,

by Mr. Yates, of Illinois, shows the quantity of public lands, sold and unsold, the proceeds of sales, and the grants and reservations of the same for all purposes, up to the 30th September, 1851:

Sold	101,633,930 acres.
Grants for schools &c.,	40,558,978 "
For Deaf and Dumb Asylums	54,971 "
For internal improvements	11,500,399 "
To individuals and companies	279,792 "
For seats of government, &c.,	50,860 "
For military services	16,019,065 "
Reserved for salines	422,325 "
Reserved for benefit of Indians	3,400,725 "
Res'd for corporations &c.,	8,655,383 "
Confirmed private claims	7,123,903 "
Swamp lands granted to the States	27,397,260 "
Central railroad grant	3,035,920 "

Total of acres unsold and unappropriated, or offered and unoffered lands on the 30th September, 1851, 1,390,586,140.

Correspondence of the Valley Farmer.

HORSE CREEK FARM, Randolph, Co., Ill., }
near Evansville, April 26th 1852. }

Mr. Editor:—I see in the April No. of your valuable Journal, the Valley Farmer, that you intend visiting the coming Summer, and as you have not specified your Southern route, I therefore bespeak a visit,—for it there is any portion of our country, that has more need of being stirred up on the subject of farming, I know not where it is; we have a beautiful farming country, but are generally as poor a set of farmers as can be produced in any Section. At a large gathering of farmers at a public Sale at Evansville, I made public proclamation and enquired how many or if any were taking the *Valley Farmer*, to aid them in the improvement of their farms, and found that not one was taking it, I insisted on every one taking it, that the information they would get sometimes in one No. would be worth double the subscription price, but all to little purpose they were indifferent about it, proving the old story true 'as mine fadder plow so I plow too,' If the most of the farmers whose wives make Butter not fit to eat and which brings 8 to 10 cts. per pound, would take the paper and read Mr. Abbott's art of making good Butter and get 20 to 25 cents per pound, I think they would soon be able to pay for a good many papers instead of one. The mod.

of making and keeping Butter as stated by Mrs. Abbott, I can attest to as being good, for I have practised it for the last 20 years and the butter that my wife puts up in the spring and summer in stone jars, I sell in your city next winter at 25 cts. per lb. and have never been able to supply a tithe of what is wanting and I like it much better at a year old than when fresh. Our spring is very cold and backward. I expect to begin planting corn this week. Wheat is not good. Oats have come up well and look fine, our fruit has escaped the frost and I believe our trees will be loaded with fruit. If you will pay me a visit I will procure you a good hunt; we have plenty of game and fine fish, and I think such an excursion would be beneficial to the restoration of your health.

Yours Respectfully J. C. R.

REMARKS.—We cannot promise our friends in Southern Illinois, but if we can arrange it so as to pay them a visit, we shall surely do so. Let our good friend persevere. The scales will fall from the eyes of the blind ones after a while. We know one instance where a man took the Farmer the first year of its existence, and with all his persuasion he could not induce a single neighbor to take it with him. The next year *one* and one only come in; the third year two. But this year he sent us a Christmas present of 23 names. There is a good time coming; wait a little longer.

Correspondence of the Valley Farmer.

E. ABBOTT:—My Good Friend—Your May number has reached me, and I see you have given my hasty letter—but in the 4th paragraph you have read ‘and,’ instead of *an*, and ‘hard’ instead of *hand*. Also ‘Greenville’ for GRANVILLE, &c., &c.

Now, there is nothing like argument in the aforesaid letter, and yet I thank you for publishing it.—for, like better men—‘Dr. Kennicott’ has no great objection to see himself in print; and he is well aware that every opinion publicly recorded in favor of a great principle—new to legislators—is of some weight in determining LEGISLATION.

In this country public opinion will always, sooner or later, show its sovereign attributes—and it is right and reasonable in a government where all are theoretically and po-
tential, and where all do think or should

think for themselves, and yet it is occasionally seen that from accidental circumstances, or the kindness of personal friends, an individual possessing very little talent, may find himself in a nominal position (as to matters of interest to the public,) which gives him a sort of warrant for showing his own thoughts to the public, as portions of public opinion—and, sooth to say, friend Abbott, you and others have done something towards placing a certain ‘cypher’ at the right hand of a ‘significant figure’—and whether counting or helping to count, my time and my energies belong to the sons of noble labor.

We may, or we may not, carry our plan for an Industrial College—but so long as it appears to me, as the greatest good that law-makers can bestow upon our productive labor—just so long, if I live, shall I unselfishly (I hope not Quixotically,) devote myself to the measure; and I hope to live long enough to see an Industrial College in every State of the Union, and the graduates of these Colleges filling a thousand District School houses in this State, with pupils who go there to learn THINGS as well as words, and plain scientific PRINCIPLES as well as unintelligible ‘rules,’ and unmeaning sentences, which are now too often found filling the space allotted to common school education in the West and elsewhere.

You ask about the effects of cold on the peach crop. Some years ago I helped to spread the opinion,—originating with my venerable friend DAVID THOMAS, if I remember---that the Peach bud would not survive 15 degrees below Zero. But D. T. and ‘Dr. K.’ have abandoned that erroneous notion---for we have seen many peach flowers, and some fruit, after 20° and even 25° below Zero.

My orchard trees are generally killed, *where the ground was well cultivated, and rather too rich*---but in sod, and dry light soil, I have many trees alive, and some of them well covered with flowers, and unopened flower buds. The flowers were healthy yesterday, but we had a heavy frost last night, and though a providential fog this morning, may prevent the entire mischief apprehended from such an occurrence, yet our chance for a crop is rather problematical.

In the garden of John H. Kenzie, Chicago—soil light sand---I observed a very good show of buds, last week. The APPLE is flourishing unequally; the CHERRY most profusely, and our few living large PLUM trees, about as well as the Cherry. There are also flowers and unopened buds on the PEAR, and the fruit promise is rather good, in general, considering the season, always provided the fog has prevented the effects of the frost, this morning.

Hastily, but cordially, your friend,

JOHN A. KENNICOTT.

The Grove, Cook Co., Ill., May 20.

The Crops.

Never have we known a season when there were more contradictory stories and impressions abroad in regard to the growing wheat crop. It is generally supposed that the prospect for a large yield is very poor, and yet we cannot find any particular locality where there is likely to be a decided failure of the crop. On the contrary most of the farmers with whom we have conversed assure us that the wheat looks pretty fair with them, though it is bad in some places. The *Brunswick* says wheat in the back country generally looks promising and the prospect is fair for a large crop. The *Aurora, Ind. Standard* says that in that region there is a good prospect for both wheat and Barley. The *Ohio Cultivator*, of the 15th May, says vegetation is now very brisk; and the prospects for a bountiful season quite favorable. — Wheat and grass generally look well. The *St. Louis Evening News* of the 22d says:—

'We are told by a gentleman from the country yesterday that the Wheat crop of this and the adjoining counties to the north are in a very unpromising condition. The wet weather has caused an unusual growth, and in many fields the stock has become so rank, as to cause serious fears of its falling. The rust too is apprehended, and without a very speedy and favorable change in the weather a short crop will be the result. The growth is so luxuriant on all the low lands as to preclude the possibility of an average yield, and then again in many parts of the uplands the stand is thin and indifferent having been frozen out during the winter. To the south and the east of this the crops are doing well particularly around Belleville, Ills.'

The early planted corn has been much injured by the cold rains which have prevailed during April and May, but that latter planted has a good prospect—if the army worm does not eat it up. Late planted corn generally does the best in this climate.

On the whole we think there is no need of apprehension that there will be any lack of corn in Egypt, or wheat in Missouri.

Correspondence of the Valley Farmer.

MR. E. ABBOTT:—I am a new subscriber to the *Valley Farmer*, and am very much pleased with it. We would like to see something relative to the management of sheep. Wool I think would be more profitable than any thing else that we can raise in this vicinity, it being easy taken to market. Freight is one dollar per hundred to Boonville.

Farmers would do well to plow around their fields to protect them from fire, and burn out the fence corners, soon after a rain. Dead grass will become dry and burn sooner than the rails. 100,000 rails are annually destroyed by fire, in this County.

I am glad we are through with Kossuth.—Some people seem to think it is impossible to have too much of a good thing.

Yours, &c.,

J. H. McNEIL, M. D.

Pleasant Gap, Bates Co., Mo., Apr. 29.

REMARKS.—We have all along urged upon the attention of the farmers of the West, the importance of Wool growing. According to the census of 1850, there was raised in the United States, 52,000,000 lbs. of wool. To make up for this deficiency, we annually import 20,000,000 lbs. of wool, and from twenty to \$30,000,000 worth of woolen fabrics.—Now, is there any reason why this should not all be raised at home? Let us look for a moment at this county of Bates. It costs, so says Dr. McNeil, \$1 to transport produce to Boonville. Well, it costs on an average, 25 cents per hundred from Booneville here, and about 75cts more or less hence to New York or Boston. Now a barrel of flour worth \$4 in Bates County will cost \$4 more to be carried into the eastern market. In this article then, the Bates County farmer can expect only half as much for his produce as the farmer who lives near to the eastern market. The fact is, this is altogether too favorable a view, for flour is not worth \$8 per barrel at the east. But how is it with wool? Set it down in the eastern market as worth on an average 40cts per pound, and allowing \$3 per hundred for transportation and you have only to deduct seven and a half per cent from that price to get its true value at home.

We hope to be able to furnish during the season a series of articles on Sheep husbandry in the West, and shall be glad to hear from intelligent men on the subject.

Farmer's Clubs.

It is not precisely the season of the year, when farmers are likely to form clubs, however much they might favor them; but the present is always the season,—and the only season,—to form good resolutions. In this age, too, as in the ages that are gone, farmers like to ruminate considerably upon any cud of information, that comes between their mental grinders. We have few of the 'veni, vidi, vici' men among us; few Cæsarian operations are now-a-days performed; the 'womb of time' produces its facts in due course. A word fitly spoken in favor of farmer's clubs may not therefore be amiss at this time; and the next winter may produce evidence, that it has not been spoken vain.

In another column of this No. may be seen a notice of a few facts gathered at the Farmer's Club of the American Institute, N. Y.,—gathered at a chance visit of fifteen minutes duration. A new grape is introduced; a new clover is brought to notice, which may be of incalculable use to us all. Without this club, this grape would certainly continued to grow; and, by and by, might twist its tendrils around public attention; but now it is at once presented to the notice of the most skillful cultivators in the country; whose decision in its favor will bring it immediately into general cultivation. The Alfalfa clover is here produced; its appearance indicates its hardness; its richness of growth is well known; its seeds are distributed; experience proves its value; and a fodder is added to our list.

Not long ago we published a Report on Sheep husbandry from the proceedings of the Farmer's Club of West Westminster, Vt., of which the Working Farmer remarks—'One such report fully warrants the meeting of a club for the entire season; even if no other paper of value should emanate from it.'

Again, in our last number appeared a paper on the making of Maple Sugar; that emanated from the Brattleboro (Vt.) Farmer's Club. It is the received opinion, even among the most experienced makers of maple sugar, that three-quarters of an inch in diameter and two inches in depth is the best bore; and that the breadth of the bore is as important as its depth. Now, by the careful and repeated experiments of this Farmer's Club, it is ascertained beyond a doubt, that the quantity of sap depends little, if at all, on the diameter of the bore, but that a depth of three inches will give twice as great a flow of sap as that of an inch and a half. The importance of this information to the manufacturer of maple sugar can scarcely be over-rated. Twice the quantity of sap can be realized from a tree than formerly; with less injury to the tree.

Can any one, 'handy at figures,' convenient-

ly reckon up the benefits which would result to the country, if any one had a club as efficient as this at Brattleboro;—as this at Westminster;—as this at New York? a club which would examine carefully into the matters that most nearly concerned them; and would give to their neighbors the results of their experiments for their guidance?—*Journal of Agriculture.*

A CHEAP DISINFECTING AGENT.—A correspondent of the Cleveland Herald gives the following piece of intelligence, well worth remembering:

Heat a fire shovel not quite to redness, and then place upon it a teaspoonful of freshly burned coffee, and let it burn in a room where the air is impure. At first you will not perceive the peculiar odor of the coffee at all; in a few moments however you find that the room is filled with the smell of the coffee, and that every impurity of the atmosphere has been totally destroyed—not smothered. Let some of your scientific readers try it, where the atmosphere is peculiarly foul, and note the result and explain the *modus operandi* of the disinfecting process.

Remember that the shovel must be only so hot as to cause the coffee to burn with a copious white smoke, and that where the air is very impure, more than the quantity above may be needed. To the sick the odor of coffee is peculiarly grateful.

Cultivating Potatoes.

We observe that a letter has been addressed to the editor of the Hartford Times, by Mr. W. Goadsall, strongly recommending all persons interested in the potato crop, especially cottagers, to pull off the flowers diligently as soon as they appear. We beg to second that recommendation. All experience shows that flowers of the potato are produced at the expense of that organisable matter which gives its value to the tuber, and which is diminished in quantity in proportion to the number of flowers that have been fed; flowers must exist and feed on something, and that something is what would, if not removed by the flowers, descend beneath the ground, and collect itself in the tubers. The mere production of flowers is a loss; but the mischief is infinitely increased if the flowers are succeeded, as they almost always are, by the berries. The actual amount of loss produced by each truss of flowers is not ascertained, but it is probable that if the flowers abstract one ounce of organizable matter, the berries consume at least twice as much. Now, the potatoes are not grown for the sake of either the flowers or the berries, every particle of matter which is consumed by the plant in producing them is a dead loss to the grower.—*Eng. Gardner's Chron.*

AMOUNT OF BUTTER FROM ONE COW.—I am not much of an agriculturist, but I have a small *two-acre farm*, which I keep under as high a state of cultivation as my limited means will admit. My *stock* consists of a horse, a cow, and thirty-four hens. My cow is an *extra animal*, and I very much doubt whether many can be found in the State, that will produce as large an amount of butter in a year as she will, with the same keeping. My wife commenced making butter from her the 10th of May last, and between that time and the 1st of February, she made *two hundred seven-five pounds*, (275.) Beat this who can! Perhaps it will be said that our cow had *extra feed*, and that the generality of cows would produce as much butter as she, if they were only as highly fed. This is a mistake. She had no extra feed from the first of February to the first of October. I then began to feed her with corn fodder and carrot tops; and when these were gone, I gave her half a bushel of carrots per day through the months of November, December and January. She is eight years old, well built and handsome, gives the best quality of milk, is pacific and gentle in disposition, and in my estimation is worth *three common cows*. If any person in the State has a cow that has done a well, or better than this, I hope he will make the fact public through the Farmer.—E. WELLINGTON, in *Maine Farmer*.

WATER MELON BUTTER.—A correspondent of the *Prairie Farmer*, presents the following method of using water melons:

I endeavor every year to raise a good water melon patch. They are a healthy and delightful fruit, I think. I cultivate the ice-rind variety; plant early in May, and again towards the close of the month, so that they may come in succession. When they commence ripening we commence eating and use them freely during the hot weather. When the weather becomes cool in September, we haul a quantity of them to the house, split them open, with a spoon scrape out the pulps into a cullender, and strain the water into vessels. We boil it in an iron vessel down to syrup, then put in apples or peaches, like making apple butter, and boil slowly, until the fruit is well cooked, then spice to taste, and you have something that most of people will prefer to apple butter, or any kind of preserves. Or the syrup may be boiled without fruit down to molasses, which will be found to be as fine as the best sugar-house molasses. We have made of a fall as much as ten gallons of the apple butter if I may so call it, and molasses, which has kept until May in a fine condition.

Many families have owed their prosperity as much to the propriety of female management as to the knowledge and activity of the father.

APPLE TREE BORERS.—In New England there is no greater pest to the cultivator, than the Apple Tree Borer. In some parts it has destroyed whole orchards. Many persons, in fact most persons, fold their hands in despair, and let the trees die. I have done better by the help of the Horticulturist—having profited by the directions given by the Editor three or four years ago. These directions are the only ones that I have seen that strike directly at the root of the matter—that is to say by preventing the borer in a winged state, the last of May and the first of June, from depositing its eggs in the bark of the tree, and thereby laying the foundation of a new brood. The old mode of killing the borers, by pushing wires into their holes in the trunk of the tree, is good so far as it goes—but it only goes half way. Since, if you succeed in killing all the grubs in that tree, a fresh set may fly over from your neighbor's trees as soon as the grubs hatch out, and lay their eggs in yours. The plan recommended by the Editor of the Horticulturist, does whole business; as many new subscribers whose trees may be infected, have not that prescription at hand, I shall beg leave to repeat it.

First, Kill all the grubs in the trunk of the tree, by pushing a wire up the holes as far as possible. Then take a pail—fill it half full of soft-soap, and stir in enough tobacco water to make it two-thirds full. Having first scraped off any loose bark, next apply this tobacco and soap paint with a stiff brush to every part of the trunk, and larger part of the limbs—putting it on especially thick at the 'croches,' and the base of the trunk—the place where the borer likes best to deposit its eggs. If this is done early in May, I can answer from experience for its efficacy. No borer will deposit her eggs in bark coated over in this way. All the merit of the prescription belongs to you the Editor, and not to your humble servant, A. R. C.

Rhode Island, April 1852.

[We may add to the foregoing, that the soap and tobacco mixture, painted over the trunks of other trees, as the ash, peach, &c., infected with borers, is equally effectual. The main point is to get it on before the insect comes out in a winged state—and south of Baltimore that is usually before this time. North of that point, the early part of May will answer.—Horticulturist.

BACON GOING EAST.—The Pittsburgh Post of May 5th, says: By the list of exports from this city by canal, the largest item is bacon, of which over *ten millions* of pounds were shipped during the month of April, and nearly *seventeen millions* since the opening; during the month of April, 33,338 bbls. flour have been shipped, and 51,592 bbls. since its opening; and of lard and lard oil 9,083,054 lbs.

PLANKROADS.—Are farmer's roads, benefiting him more than any other class of the community.

In the 'Mechanique Industrielle,' there is a table given of the relative resistance from friction for wheels in motion on roads formed of different materials, from which may be shown that a horse can draw twice as much on a good Plankroad as on a common earth road in good condition.

I may as well mention here that a Plankroad load is also twice that of a McAdam road.

From actual experiment made in this country with the *dynamometer*, it was found that a horse, by exerting the force he would in common plowing, can, on a Plankroad, with a grade of one foot rise in twenty horizontal, haul 2,500 pounds.

On a road in Canada, two horses draw 16 barrels of flour; or upon any plankroad, with a grade no greater than one foot in twenty, two tons to two horses is a comfortable load.

These are no imaginary conclusions, but based upon scientific experiments.

Again, the Plankroad stands independent of the elements, affording free transit at all seasons; enabling the farmer to take advantage of the markets, and sell when prices are most favorable. Another advantage consists in the time saved. A horse can trot over a Plankroad with 40 bushels of corn with less injury to himself than he would sustain on a natural road with twenty bushels, and travelling at a slow pace.

The tolls which the farmer pays on Plankroads cannot be deemed a direct tax, when we consider the immense saving in horse power, harness, &c. The great speed and large loads will, of themselves pay the tolls.

Another consideration is, that every man who travels a regularly laid out road of any kind, is expected to pay for the use of it in some way. If he pays no toll, he does a road tax! But a road tax often bears unjustly upon the community; for the man not worth a horse, is obliged to pay equally with one using the road constantly. But on the toll system, those only pay who use the road; and every man pays in proportion to the amount he uses it. If a farmer lives at a distance, and has a good natural road, upon which he can get to market cheaper than by going on the Plankroad, he pays no tax at all.

The Orchard Caterpillar.

Levi Bartlett, Esq., communicates the following to the Granite Farmer concerning this pest, and his method of removing it:

In the Farmer of the 14th ult., I noticed an article on the orchard caterpillar, by H., of Bedford. His history of the spring caterpillars which feed upon the apple and cherry

tree—or rather upon the leaves of these trees—is quite correct. They are a very different insect from the summer or web caterpillars, that have become so abundant within a few years past. The elm, ash, cherry, and many other kinds of trees, besides the apple, were disfigured by their large webs the past season. The eggs from which the spring or early caterpillars are hatched, are deposited by a miller or moth 'transformed by a caterpillar.' The eggs are placed around the limbs or twigs, forming a kind of ring or bracelet; this ring consists of three or four hundred eggs, in the form of short cylinders, standing on their ends, close together, and covered with a thick coat of brown varnish. They remain in a dormant state from the time they are deposited by the winged moth in July or August, till about the time of unfolding of the apple and cherry leaf in the latter part of April or beginning of May. They continue in the caterpillar state about seven weeks. Their habits, ravages, and the unsightly appearance of their nests, are so generally understood that nothing further need be said upon these points. Many of the eggs can be removed from the lower limbs of the trees by searching for them in the winter or early in the spring. Those who escape and hatch out, should be destroyed soon as the nests are seen. For this purpose a spiral brush is the most effective instrument I have used for ridding my trees of these 'useless intruders.' A mullein head tied to a pole answers as a substitute for the brush; its rough surface readily winds up the silky nests with its occupants, and they are easily crushed.

Going over an orchard two or three times in this way with the brush, will rid it of the spring caterpillar. The summer, or web caterpillars, are hatched from eggs laid by the parent moth, (a winged insect,) in a cluster upon a leaf near the extremity of a limb. They are hatched from the last of June to the middle of August, some broods being earlier and others later. The young caterpillars immediately began to provide a shelter for themselves by covering the upper side of the leaf with a web, which is the result of the united labors of the whole brood. As they increase in size, they enlarge the web. Thus they go on increasing the size of the web, devouring only the upper skin and pulpy portion of the leaf, leaving the veins and lower skin of the leaf untouched. Toward the end of August and during the month of September, they leave the trees and disperse, wandering about till they find suitable places for shelter and concealment. Here they wind their cocoons and remain through the winter. In the months of June and July they are transformed into moths. These moths are white and without spots; their fore thighs are tawny yellow, their feet blackish. Their wings expand one

and a quarter inch. The only time we can attempt to exterminate these destructive insects with any prospect of success, is when they are young and first beginning to form their webs on the trees. So soon, then, as the webs appear on the extremities of their branches, they should be cut or stripped off and be crushed under foot. The cabbage butterfly, the black squash bug, and many other insects, deposit their eggs upon the under side of the leaf, similar to the parent of the caterpillar above described.

The Cheese Trade.

We copy an article from the Cincinnati Price Current of interest to all Cheesedom. It shows that the receipts of cheese at Cincinnati for the past year reached nearly nine millions of pounds, there having been an increase of nearly fifty per cent per annum for the last three years. Other interesting details and statistics of the cheese business are given.

The Cincinnati Gazette states that the cheese business there has wholly grown up in twenty years—that thirty years ago it had no existence, and add:

In 1823, Messrs. Baldwin and Granger, enterprising traders in the Western Reserve, brought to Cincinnati, in a large skiff, about fifteen hundred pounds of cheese. After stopping a few weeks, they sold a small part of the cargo; then dropped down to Louisville, and other small towns on the river, and peddled out the balance, which required three months time in all. The next year they loaded a small flat boat with about four tons of cheese, and stated for Cincinnati; after stopping at our landing for three days, they sold half of one cheese and gave the other half to an old acquaintance. They then started for Louisville, where they stopped two weeks—selling about one ton. The remainder they divided, taking half to Nashville, and up the Tennessee river to Florence, Alabama. After great exertions, the lot at Nashville was sold in about a month, but that at Florence was not closed up for five months; and just one year elapsed from the time of purchase, before the account was closed up by receipt of proceeds. From such a humble beginning started the cheese trade of Cincinnati.

PUSHING TOMATOES.—Those who love good tomatoes will take pains to cultivate them so as to insure them as near as may be in their full perfection. There is no other fruit that delights more in air and sunshine than the tomato. They should have therefore, abundance of room and the vines be sustained from falling to the earth. I have found stout brush, firmly set around the plant, to answer the purpose better than any other method. The

branches have room to extend themselves as they like, while the limbs of the brush keep them in their positions. By this method the fruit is more fully exposed to the genial influence of the air and sunshine, whereby it attains a more delicious flavor, larger size, and comes quicker to maturity. — *Rural New Yorker.*

If you want good radishes, spade in a good quantity of manure, so as to make the ground light and rich; they will then grow rapidly, and of course be tender and nice. You can have them in this way, without the trouble of mixing half sand with the soil, as some old cultivators contend.

RHUBARB.—Garden Rhubarb, writes the Rev. A. Bigelow to the N. H. Monthly Visitor, is valuable as an early vegetable. For sauce and pastry, it is a good substitute for apples and other fruits, it being ready for use at a time when these fruits cannot easily be obtained. Its goodness, however, depends much on its being so cultivated as to secure a large and rapid growth. For this purpose select a location to which the sun has a free access. Then form a space of sufficient length and width, remove the earth to the depth of two and a half feet, and fill the trench with rich soil and manure. Let the latter be used plentifully, for Rhubarb is a great consumer, and there is no danger of enriching it too much.—The ground being thus prepared, the plants may be inserted with their tops two or three inches below the surface.

This mode of planting involves some labor at first, but the process need not be often repeated, for the same plants, thus set, will produce well for years with proper care and manuring. Besides, my maxim is, what is worth growing at all is worth good cultivation, such as will bring the vegetable cultivated to something like perfection. And I have never seen this maxim more favorably illustrated than in the case of rhubarb when treated in the manner above described. It then has a rapid growth, and produces stalks of unusual size and tenderness. To protect and enrich the plants, a good covering of manure should be applied in the fall and mixed with the soil in the spring.

WIRE WORMS.—According to a statement in the Prairie Farmer, salt is not agreeable to this larva. Land infested by thousands was sown in the fall with refuse salt at the rate of three and a half bushels per acre. The next summer very few were seen, and afterward all gradually disappeared. Worth trying, at least, although the proportion of salt when dissolved in the soil would be only about one fifty-thousandth part. — *Alb. Cult.*

THE PROGRESS ON THE WEST.—And this West! Where was it a few years since, and what is it destined to become? The pamphlet now lying before us, containing the reports of the President and the engineer, John B. Jarvis, of the Chicago and Rock Island Railroad, calls to mind very vividly our experience of the past. Thirty years ago we were a lieutenant in the army, stationed at Chicago, which was then a frontier post, two hundred miles in advance of our most western settlement. There were then five sail vessels and one steamer on Lake Erie, St. Clair, Huron and Michigan; and to reach Chicago under the most auspices was a journey of more than a month. Now it is performed with ease, comfort and safety in thirty-six hours! Rock Island, situated on the Mississippi, was then, even in its relations with Chicago, the far-west—being a garrison belonging to the Valley of the Mississippi and approached from the South in summer.

And we had the pleasure of being the first white man in all that region, who was known to have crossed from Chicago to the Mississippi in the winter season. We walked the distance between Chicago and Rock Island in ten days, through a deep snow and over bleak prairies, with the thermometer below zero, through a tribe of hostile Indians (the *Wannebagoes*) whom we avoided by avoiding the comforts of the woods and heeding the prairies. We however accomplished our purpose, and were none the worse for our exposure; but little did we think in all that time, that in the brief space of thirty years, all that region could be densely populated—boast of its millions of inhabitants west and south of Chicago, and we be called upon to invite attention to the construction of an iron way, destined to connect that distant spot with this city, by means of which the intervening distance could be traveled in thirty-six hours. And yet after a lapse of nearly thirty years, this important impossibility has been achieved.—*New York Courier and Enquirer.*

Premiums for Reapers and Hay Presses.

The following resolutions were adopted at a recent meeting of the Maryland State Agricultural Society, and are worthy the attention of patentees of Reaping Machines, and Hay and Tobacco Presses. The competition for the premiums, is open to the whole country, and a jury of twelve persons has been appointed to award the prizes, after a careful and thorough trial of the machines.

Col. J. C. WALSH, of Hartford, called the attention of the society to the importance of a change in the present mode of awarding premiums for certain objects which he specified, and to correct which, he offered the following preamble and resolutions:

Whereas, It being a matter of considerable

importance to the agricultural community of our State, that all farming implements, especially those involving a considerable expense in their purchase, and which, if properly constructed, would be profitably and extensively used, should be properly tested, and their merits and demerits made known by a fair and impartial examination and trial, it is therefore

Resolved, That a committee of twelve members be appointed by the chair, whose duty it shall be, at some convenient period during the ensuing harvest, to examine any reaping or mowing machines that may be presented to their notice, and to report to this society, at its annual meeting in October, an opinion of their respective merits, based upon their actual performance in the field. It shall be the duty of said committee to give notice in the public prints, of the time and place selected for the trial. It is further resolved, that to the exhibitor of the machine possessing the most valuable properties, as decided by the committee, a premium of \$100 shall be awarded by the society.

Resolved, That a committee of twelve members be appointed by the chair, who shall at as early a day as practicable, invite the proprietors of the several hay or straw presses now in use, or any others which may be exhibited to an actual test of their qualities in presence of said committee; and to the exhibited by it as most deserving, a premium of \$50 shall be awarded by the society.

Col. BOWIE then moved that a premium of \$50 be offered for the best tobacco press, and that a committee of twelve be likewise appointed to make a practical test of the machines which may be offered to their inspection, at such time as the committee may select which motion was adopted.

IS IT TRUE.—Prof. Amos Dean, in his Address before the Essex Co. Agricultural Society, related the following:

‘There is much in what one of the mountain patriarchs among the hills of Berkshire, told Henry Clay, when he was commending them for their morals and industry. ‘Yes,’ he replied, we are a hard working people. We dig and plow all the day; and when night comes are too tired to sin.’ I am afraid that in cities, and more highly favored regions, the reverse may be true and that after sinning all night, they are too tired to work.’

PUNCTUALITY.—Ah! that’s the word—punctuality! did you ever see a man who was punctual, who did not prosper in the long run?—We don’t care who or what he was—high or low, black or white, ignorant or learned, savage or civilized—we know that if he did as he agreed, and was punctual in all his engagements, he prospered.

Ode to Labor.

BY LUCY A. COLBY.

I roved in spirit wide around
Beneath the blue o'erarching skies,
And everywhere I heard the sound.
The ceaseless din of toil arise.

On sunny slope, the shepherd swains
Were tending flocks—a pleasing sight?
From harvest-fields the loaded wains
Went slowly tolling home at night.

Amid the forest's ancient gloom
The axeman's blows resounded far,
And in the factory, wheel and loom
Kept up their loud, unceasing jar.

Deep in the mountain's wealthy cave,
The miner wrought in vague alarm,
Far off upon the briny wave
The sailor toiled in storm and calm.

The student, pale with thought, at night,
Was bending o'er the lettered page,
And learning, by his waning light,
The wisdom of a bygone age.

The poet wandered by the stream,
And in the hoary woods sublime,
Decanting on his glowing theme—
The promise of a better time.

I looked; and following in their train
Lo! Plenty came with noiseless tread,
And for their hours of toil and pain
Her bounteous gifts around them spread.

And then I blessed thee, hard and stern
Although thou art, O Labor! when
I saw the fruit of toil return
And cluster around the hearts of men;

TO PROVE SEED.—Plant some in a box of warm earth. Seeds with hard shells, should be soaked in tepid water from 24 to 48 hours. It is said onion seed may be proved by tying in a cloth, and laid in cold water, and the temperature of the water raised to boiling point. If good, they will sprout in half an hour.—Some vegetables are benefited by being transplanted, while others cannot be removed without serious injury. Those with milky juices are most difficult to transfer. Small seeds should be sown shallow, in fine earth pressed down tightly with a spade or board, so that the earth may come in contact with the seeds and the little rootlets find immediately support.

Wisconsin Farmer.

NOT TOO LATE TO PLANT.—The New England Farmer furnishes a communication from H. F. French of Exeter, N. H. in which he says, 'Mr. McClintock, of Portsmouth, who is now ninety-four years of age, this year ate the fruit from trees planted by his own hand when he was eighty-six.' Another gentleman, having a very fine orchard, said, 'I am more than seventy years old, but I have set over one hundred apple trees this fall.' Again, he informs us that 'Mr. Robinson says that when he planted his orchard with seedling trees more than fifty years ago, his friends told him there could never be a demand for so much fruit.' Yet this same year he says a gentleman of Hampton, in that State, sold fruit from about four acres of land this season for \$800, and last year for \$1400.

The Physical and Intellectual Pleasures of Farming.

We are unable to resist the temptation to transfer to our pages, the following communication from Frederick Holbrook, one of the associate Editors of the New England Farmer, to the columns of that paper, in answer to the queries of a correspondent.

Mr. Holbrook's connected style rarely allows of the selection of detached passages.—So closely do what precedes and what follows depend one upon another, that a fragment gives as little idea of the whole, as a Philadelphia brick would give of Chestnut st. block. 'Good wine needs no bush,' so, without any palaver, we let our friend speak for himself.

Ed. Jour. of Ag.

I come now to a direct practical answer to your question—'In what does the secret consist of finding any real substantial pleasure in the operations of farming?' Among other things you name 'the monotonous business of holding the plow from early in the morning to late in the evening.' As too commonly conducted, I grant that plowing is not a particularly agreeable business, and that you have described it quite tersely. Too many plowmen, having little or no thought about the true philosophical principles of their business, are more anxious to get over the greatest possible breadth of land in a day, than to do proper and the best work. They cut their furrows too shallow, and as wide as, or wider than the plow can possibly turn them, and what portion can not be got over with the plow aided by the foot of the plowman, rolls back into its bed again, and the next time round its 'grass side up' is put out of sight by the 'cut and cover' operation, making a high ridge of earth with a deep hole beside it. The furrows are also very crookedly cut, and therefore do not match together at all well. The plowman twists and turns himself in all manner of shapes, is vexed with his plow, scolds at and whips his team furiously, labors and tugs and sweats away, 'from early in the morning to late in the evening,' and can show you as big and as mean a day's work as you could wish to see, with hardly a rod square of passably good work in the whole piece. I would not allow such a workman to plow a day for me, if he would do the work for nothing and pay ten dollars for the privilege. But if properly conducted, say for ten hours in a day, which is all a merciful man will require of his animals of draught, however he may be disposed as to himself, plowing is one the finest and most exhilarating employments in the world.

Did you ever investigate the accurate phil-

osophy of the plow and plowing? Take a highly improved modern plow, and study it. Look at it as a whole implement, and at its several parts, and reflect what a world of profound study it has cost to produce such an implement. What high mechanical principles it involves, and how beautifully do they combine together to produce an exact and most valuable result. There is the mould-board alone, although an exact mathematical combination, yet it is a problem for you, (I speak advisedly) which, if you have not solved it, its solution will give you a prettily sharp brush, with all your mathematics. Then too, a combination of mathematics, a little varied to suit each case, will give you the best form of mould-board for sandy and gravelly soils, for clay, and heavy moist soils generally, and for best working stubble land. The plow best adapted to sandy, and generally light, dry soils, will lay flat furrows, accurately shut in beside each other, thus preventing a too great natural tendency to evaporation, incident to such soils. Your mathematics will show you that a coulter set bevelling to the land, an inclined landside to the plow, and a concave mould-board, all contribute to facilitate the laying of flat furrows, and that it would be difficult to drop the edges down accurately beside each other without these several provisions. The plow best adapted to clay and other heavy or moist soils, cuts rectangular furrows and lays them at an inclination of 45° to the horizon. Your mathematics will show you that this is the best position for the furrows of such soils to be placed in. It can be undeniably demonstrated that none but rectangular furrows, whose depth is to their width as two is to three, *can be laid at an inclination of 45°* ; that rectangular furrows, whose depth is equal to two-thirds the width and which are laid at an inclination of 45° present in their projecting angles, a greater surface of soil to the ameliorating influences of the atmosphere, and greater cubical contents of soil for the harrow to operate on in raising a deep fine tilth, or seed-bed, and permit underneath them a freer circulation of air, and passage from the surface of superfluous moisture, than furrows of any other form or proportions that are practicable to be turned. The plow in the very best manner adapted to the working of stubble lands, will be higher in the beam to enable it to pass obstructions, and shorter in the turn of its mouldboard, than either of the preceding, will have a greater depth of iron in the back parts of the mouldboard, which will tend to throw its stubble furrow all over to an inverted position, and leave a perfectly clean channel behind it for the reception of the next furrow. Thus you see there is quite a philosophy in plows and in plowing,—which the intellectual farmer is bound to understand.

However dull and monotonous the business of plowing may be to you, it is not so at all to me. Starting my team a-field of a bright spring's morning, with my plow all bright and clean from its winter quarters, I feel as honest a pride and pleasure at the thought of my occupation as I ever do when engaged in any employment. I strike out my lands with a furrow as straight as an air line. After this is accomplished, I gauge my plow to cut deep furrows, and as narrow as is possibly compatible with the depth, and then take them off the land of uniformly exact depth and width, never allowing a crooked furrow to be seen in my plowing. To me it is very exhilarating to see the furrows roll off my polished mould-board, and lay beside each other with as accurate a finish as though they had been joined by a carpenter's tools, and to think, as my eye surveys the smoking soil thus prepared, how mother earth always delights in bountifully rewarding the careful husbandman,—that she invites a liberal, intelligent and accurate cultivation, by returning as compensation a greatly increased crop. I say to myself that I am one of the number engaged in an operation without which man would not have bread, civilization could not advance or be sustained, and which was one of the fundamental operations early contributing to elevate man from the barbarous state, and fix him in the abodes of civilization. I remember that the plow has been regarded with a sort of sacredness by men in every age, that even far back—

‘In ancient times, the sacred plow employed,
The kings, and awful fathers of mankind;’

and that now, it employs many of earth's choicest spirits. This occupation brings me fine health, refreshing slumbers, and while engaged in it, I can think as accurately as under any other conditions whatever. Indeed, if I were called upon to prepare a public address, an article for the press, or to engage in any other intellectual exercise, I could fix upon and arrange my subject, and bring to it quite as much vigor of thought and shape it into as logical an arrangement, as under any other circumstances.

My friend, you will find more or less philosophy connected with the proper performance of almost any of the methods of agriculture; and that many subjects, requiring further scientific inquiry, exist in even the commonest operations of husbandry. Your soils need to be fully understood, that you may supply their wants and correct their superfluities. The various ingredients or properties of your manures must be known, together with the theory of composting, and must be applied properly. The properties that go to make up your crops must be found out, so that you may best adapt the crops to the soil, or if your soil is deficient in ingredients requisite to the raising of some

desirable crop, they must be supplied by proper manures and cultivation. Fruits, for home use and for sale, must be produced, and a world of scientific investigation may be well employed, in finding out their best management, the character and habits of insects injurious to them, and the best means of preventing their depredations. The wet lands must be drained, which requires a combination of science and practice. Irrigation produces wonderful effects, may perhaps be within your reach, and its theory and best management must be found out. The philosophy of breeding domestic animals, a beautiful and interesting study, generally poorly understood and miserably practiced in our country, must be investigated. * * * *

I have been thus earnest in stating the case as I understand it, because our agriculture has been quite long enough cursed with a prevailing sentiment that the farmer does not need much knowledge, and could not use it practically and profitably if he had it. It is claimed by many that the principles of correct cultivation are few, and all found out; that farming is a mere monotonous routine, for physical labor to conduct; that he is the best farmer who can do the biggest day's work with his hands, who can skin his farm the cleanest and put the proceeds of his fertility at interest, spending little or nothing for the improvement of himself and family, and nothing to make home attractive.

Talk to many of our people of the advantages of applying the sciences to the cultivation of the ground, and about better educating the farmer, and they will tell you that it is simply ridiculous nonsense. I say these things are a curse to agriculture every way; and particularly so because many of our brightest and most enterprising young men, sickening at the thought of engaging in a pursuit thus advocated and practiced and unwilling

*'To dudge through weary life without the aid
Of intellectual implements and tools.'*

go off to other pursuits, when, if they could have had one-half the thorough training to fit them for farming which they were obliged to go through to be prepared for some other pursuit, we should now see much more of correct, profitable cultivation than is seen.

I have to say to you, in conclusion, my young friend that if you wish for a field of honorable usefulness second to no other, for a naturally dignified pursuit, where cultivated intellect may find full scope, whereby a practically judicious application of the natural sciences which illustrate agriculture you may wield a large influence for good to others, then stick to your farming. True, it will not bring you great wealth; that is with difficulty attained, by comparatively a few; it usually re-

quires of him who seeks it the devotion of his every energy, while it is not his greatest good, but sometimes proves an evil, either to himself or children.* But an enlightened cultivation of the earth will give you a competence, and will prove favorable to mental culture and virtue. Your home, though modest and inexpensive, may be adorned in many little ways which will tend to make it the tasteful and fitting abode of virtue. A moderate outlay will in these days of improvement, furnish you an assortment of the very best books, so that seated before your hearth you may commune with the choicest thoughts of gifted men. While abroad in the fields, nature will give you lessons of the deepest import. Your lands will furnish you a laboratory for the testing and practical application of sciences. These things are within your reach—not like wealth difficult and hard to be won, and only by a few,—they are

*'No special boon
For high and not for low, for proudly graced
And not for meek of heart. The smoke ascends
To heaven as lightly from the cottage hearth;
As from the haughty palace. He whose soul
Panders this true equality, may walk
The fields of earth with gratitude and hope.'*

F. HOLBROOK.

Brattleboro', Feb. 24, 1852

From the Rural New-Yorker.

Moral Advantages in Rural Life.

People residing in sparse settlements are not, in all cases, aware of their superior advantages, morally, over the denizens of the city. While regretting that they are deprived of some of the literary privileges enjoyed by the latter people, they should not forget that, as an offset to this, they escape some of the evils universally prevalent in large towns, and are otherwise directly and highly favored.

The superior moral advantages of country people over others, is seen in the first place, from the fact that they are totally exempt from the influence of certain vicious characters, common, and confined to, populous thoroughfares. Rural architecture does not embrace the subterranean saloon, the billiard arcade, the bowling alley and the theatre; hence the infesters and pillars of such edifices,—gamblers, counterfeits, burglars, libertines and harlots,—are at best,—or rather, the worst—but temporary sojourners in thinly settled districts. They could no more thrive there, than fishes could perform an overland journey from one ocean to another. In either case—the case of the scaly aquatic or the scaly mammal—the animal would be out of its natural element, and would fail in its attempts at respiration.

In the second place the moral position of country people is preferable to that of others,

from the fact that the temptations to some of those vices which are practised more or less in all places, are much weaker in rural than in civic communities. Drunken shops are neither so numerous nor so gaudily fitted up and tempting on the domain of agriculture as beneath the eye of commerce. Profanity sounds more revolting 'under the eye of the open sky,' through which God seems to be looking down, than amid the din of traffic, the mingled and half stunning voices of bloated thrift, shriveled and sniveling integrity, insane ambition and obstreperous infamy. Obscenity is more disgusting in 'God's first temple,' the sylvan canopy of the virgin earth, than in the filthy streets where stunted benevolence and repressed reverence abide, painted women perambulate, and libertines stand like *pseudo* lamp posts to darken the way to hell! Niggard inhospitality and sneaking avarice are not only more noticeable but more hateful, where Nature scatters her bounties with a magnificent hand, than where naked walls of towering and interminable blocks, present their barrenness and half conceal the light of day, which has that effect upon the heart which heat has on all hard bodies. The love of money—which love is the 'root of all evil,' and prevails everywhere,—approaches less near idolatry in the country than in the splendid metropolis; for in the latter place the temples of mammon line every street and even the shaded avenues in the suburbs.—Here, too, the masses form the worshippers, and like a mighty current bear everything onward in their broad and sombre channel.

In the third and last place the country is morally preferable to the city, from the fact that the former presents, direct virtuous and religious influences unknown in the latter. 'In its social organization, as well as in its physical structure,' says Rev. W. W. Everts, 'it may be said 'God made the country,' with its domestic associations, relations of equality, its regular industry and habits and, its mutual and unrestricted sympathies; and 'man made the town,' with its anti-domestic associations, undue distinctions of classes, hurried and thoughtless life, and restricted charities.'

There is a strong moral influence in the pure air of the country; in the music of humming insects, the vernal harping of newts, the livelong caroling of numberless birds, the shout of dancing cascades, and the roar of torrents; and in the prospect of waving fields of grain, far stretching intervals plumed with the richest verdure, rolling prairies, lakes sleeping in the sun and mountains aspiring to heaven. To these influences the inhabitants of the city are strangers, and ever must be, until their abode, like the millennial Jerusa-

lem as portrayed by Zacheriah, 'shall be called a city of truth,' and its sanctified streets 'shall be full full of boys and girls playing in the streets thereof.'

J. C.

Buffalo March 1852.

Comparative Expense of the Horse and Mule to the Farmer.

MR. EDITOR:—For the last four or five years I have devoted my time mostly to farming, and during that time I have paid a good deal of attention to the feeding of my horses; and, therefore, have learnt pretty well the expense of keeping that animal on the farm. I have long since come to the conclusion that the mule would be much cheaper as a working animal on the farm than the horse, and have, therefore, determined, as soon as I can dispose of my horses, without too much sacrifice in price, to procure a full team of them, and use them in all my farming operations. When I take into consideration the very great saving to the farmer by the use of the mule instead of the horse, it is a matter of great surprise to me that our improving and intelligent agriculturists should have delayed a thing of such importance as this to this time. I can only account for it in this way—that, until within a few years past, there has been no accessible market for our surplus corn, and, therefore, it was not considered expensive to feed it away lavishly to horses; and thus having become accustomed to the horse and this wasteful mode of feeding him, our farmers have come to regard it as all right and proper. But we are now placed under very different circumstances. Canals, plank roads and railroads, now offer facilities to markets for our surplus grain of all kinds; and to continue the old, extravagant, and wasteful habits of feeding it away to horses, when a ready market and remunerating prices are offered us, is, to say the least, very bad management—management decidedly behind the times.

But a change in this respect has commenced. Some of our practical and sagacious farmers have commenced the work of reform; have dispensed with the horse, and supplied themselves with mules. Some of these have assured me that they were much pleased with the exchange; so much so, that they would advise their friends to give away their horses, if they could not sell, and purchase mules.

I propose now, Mr. Editor, to give you a calculation in figures of the saving to the farmer by the use of mules instead of horses; and, for that purpose, I will take a team of ten for a period of twenty years; will suppose the horses and mules to cost at their purchase the same price, and will estimate the difference, saved in the feeding of the mule, of Indian corn, at six barrels each per annum, or that

the horse will consume twelve and the mule six barrels each per annum, to keep them each in good working order.

Upon that data I make this exhibit:—

10 horses will consume each 12 bbls. corn per annum, say for 20 years, which is equal to 2400 bbls., worth, on an average, \$2.50 per barrel	\$6000
Shoeing ten horses will cost \$30 per annum, (\$3 each; or more, which we have to pay,) say for 20 years	600

Cost of feeding on corn and shoeing 10 horses for 20 years.	\$6600
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10 mules will consume each 6 bbls. corn per annum, say for 20 years, which is equal to 1200 bbls., worth on an average, \$2.50 per bbl.—no expense of shoeing.	3000
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Amount saved in 20 years by mules	\$3600
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According to this estimate, we have the surprising sum of \$3600 in twenty years, or about \$200 per annum, gained or saved by having mules instead of horses; but large as this sum is, it can be fairly augmented to upwards of \$4000, by taking into the calculation the greater longevity and exemption from diseases of the mule, which items are not set down in the above statement. At the end of the twenty years, how will the matter stand? In all probability, the horses will all, or nearly all, be dead, while the mules, we reasonably suppose, unless very badly treated, will all, or nearly all, be living, and be good for service for some five or ten years longer.

I am, therefore, Mr. Editor, the warm advocate of the mule, and, as I before said, my determination is to give up the horse as speedily as practicable, and supply his place with the mule. Mules have been scarce and high for several years, and I have thought it a good plan to get some large mares and raise from a large jack. They can be raised at a very trifling expense, and are ready for work at an early age. I have already commenced raising and have two now for a beginning.

If my estimate approximate to reality on this subject,—and I feel great confidence it does,—then it is a matter of grave importance to the whole agricultural community that they should bestow some attention to a matter which so largely concerns them.

That the mule can do as much and as efficient work as the horse, I think there is no doubt, especially if the mule have size and weight, which should be the case. Three good mules will draw a three-horse plow, and do as much work as three horses, and in the heat of summer fallow, which is fatal to so many horses, you never hear of any injury to the mule.—*Am. Vet. Journal.*

Teeth of Horses.

The following is copied from a little volume published thirty years since in Virginia:

'A horse that has arrived at an age fit for service, ought to have forty teeth, twenty-four grinders, twelve fore teeth, and four tusks. Mares, however, have but thirty-six, except when they happen to have tusks, which is by no means common.

It is by the fore-teeth and tusks that the age of a horse is to be judged of, and as they are not generally put to service until they come three years old, (and indeed that is one year too soon,) we shall commence our description of the teeth at that age.

At three therefore, he will have four horse and eight colt teeth, the horse teeth which are called piners, have a deep black hole in the middle; while those of the colt are round, solid and white.

A short time before the horse comes four year old, he loses four middle teeth, two above and two below, which are followed by four more horse teeth with black holes in the middle, the same as the piners.

A few months before he comes five, he sheds the four corner teeth, two above and two below, which is his last colt's teeth; and at five they are replaced with horse teeth hollow as before described, and grooved on the inside. At this age he also gets four tusks, the two lower ones generally three or four months before the upper.

Some horses, however, never have any upper tusks, but this is not common. The appearance of the two lower tusks is the most certain proof that the horse is coming five years old; even if some of his colt's teeth still remain.

When he is nearly six, all his fore-teeth are full grown, pointed, and a little concave on the inside. At six, the grooves on the inside begin to fill up, and soon after disappear; the black holes in the middle of the teeth also begin to fill up, but are still very apparent.

At seven, all the fore-teeth except the corner ones, are generally filled up smooth, though a black spot in the centre may yet appear. Between seven and eight the corner teeth also fill and become smooth; after eight, it is difficult, by some held to be impossible, to judge correctly of the age of a horse; all the striking marks of his mouth have disappeared.

After which period, recourse must be had to the general aspect of its mouth. If the tusks be flat and pointed, and have two small grooves on the inside, which you can readily feel with your finger, be assured he is not old, probably not yet ten; but if you find only one groove within the tusk, you may conclude that he is approaching twelve.

After twelve, grooves generally disappear

and tusks become as blunt and as round with-in as without. The length of the teeth is by no means a certain criterion to judge of the age, though long teeth, projecting forward, certainly indicates an advanced age, as the teeth of young horse are not so long and generally meet almost perpendicular.

The lips of a young horse are very firm and elastic, while those of an old one are soft, flabby, and hanging, and the tongue often so large that the cavity of the mouth is scarcely capable of containing it.

The holes in the centre of the teeth sometimes continue to an advanced age, but when the tusks become round and blunt, the fore-teeth long and projecting forward, the tongue large and lips flabby, the horse is most certainly old, say from twelve to fifteen, or upwards, notwithstanding any apparent marks to the contrary.

Having noticed all the marks which serve to instruct us as to the age of a horse, it is believed that a person of the most common capacity may, by paying attention to the foregoing directions, ascertain the age of a horse with a considerable degree of certainty, at least until he is too far advanced to be of much value.'

VETERINARY COLLEGE NEAR LONDON.

The object of this institution is to qualify persons, by the study of comparative anatomy and physiology, and by opportunities for witnessing hospital practice and investigating the symptoms and phenomena of disease in the lower animals, to practice veterinary, surgery and medicine; and to do what can be done, by skill and science, for the relief of the sufferings, and the cure of the maladies of quadrupeds of all kinds—horses, cattle, sheep, dogs, &c. For this purpose, a number of gentleman associated, and, by a subscription for life of twenty guineas each, or an annual payment of two guineas, laid the foundation of this excellent and humane establishment.

An extensive plot of ground, about three miles from the centre of London, was obtained, and the necessary buildings—consisting of stables and loose boxes; long piazzas, for the purpose of giving the patients exercise in bad weather under cover; a room for lectures and dissections, and for a museum for anatomical preparations; and specimens of diseased organization, and a forge for shoeing, together with apartments for the resident professor, and for the accommodation of the servants of the establishment—have been erected; and already nearly or quite a thousand pupils have received diplomas or certificates of their qualifications for practice, and have gone to the business of their profession in different parts of the kingdom, in the army, and in foreign

countries.

Subscribers to the establishment have the privilege of sending their horses, or diseased animals to the institution, without any other expense than the cost of their food; but no animal can be admitted which is not the property of either an annual or a permanent subscriber. The horses of subscribers are sometimes prescribed for at their own stables, when it is inconvenient to send them, provided the medicines are compounded at the college. In case the disease of an animal is pronounced desperate, the owner, upon paying the expenses already incurred, may surrender him to the college; and if, by any treatment which they may see fit to adopt, the animal is recovered, the owner may have him again by paying the additional expenses since his surrender, or he will be considered the property of the college. Horses, likewise, may be shod at the forge of the college at the customary charges. Subscribers, likewise, at a distance, have the privilege of procuring any medicines or drugs, which may be required, compounded at the college, and furnished at the actual cost.

A principal and an adjunct professor of Veterinary science and practice—men eminent for their knowledge and skill—preside over the institution, and give regular courses of lectures and examinations; and the number of patients in the infirmary is generally such as to afford the students an opportunity of seeing a considerable variety of practice, especially among horses, to which, hitherto, the practice has been mainly confined. Besides this, through the liberality of the professors of the Medical College the students at the Veterinary Institution have an opportunity of attending the medical and anatomical lectures gratuitously at these institutions; and, to guard as far as possible against ignorance and incompetency, no student can receive the diploma or recommendation of the institution to practice, until he has passed a regular and thorough examination, and has been qualified for the duty.

This is a most excellent institution. In an economical view, it is highly important; for the amount of property in live stock is every where very great: and here, where, as in several establishments kept by a single individual, there are twenty and thirty, and sometimes forty horses for hunting, and in other cases as many more for racing,—and where, as in several cases within my knowledge, packs of dogs, of very great original cost, are kept at an expense of from fifteen hundred or two thousand pounds, or from seven thousand to ten thousand dollars a year, and in many cases more than that,—it is easy to see what a large amount of property is at stake, and to what care it is entitled. I have been at one or two establishments where the horses in the stables, exclusive of horses for farm work, amounted to six-

ty or eighty. The large number of cavalry horses belonging to the army, render the services of a veterinary surgeon in such establishments of indispensable importance.

Surgery, as an art, has been carried to great perfection; and in some circumstances, hardly anything more seems wanting than to breathe into some of the artificial anatomical preparations the Promethean fire, and set the circulations in motion. Medicine, indeed, presents but few infallible remedies; but something has been done: and if comparatively little has been accomplished by physic, yet much has been done by a curative treatment and regimen. I am aware that it is quite customary to say of many novel, and certainly very gentle modes of treatment, of recent date, that the patients are cured by the imagination; and this is as agreeable a mode of cure as blood-letting or powerful doses of calomel and jalap, or the exciting operation of Spanish flies. It is obvious, however, that, until we make further progress in phrenological science, we can do but little by applications to the imaginations of horses or dogs. But, whatever imperfection attaches itself to medical science, something at least may be gained from it; and it certainly presents the only practicable and probable means of learning the nature of disease, and combating its power. At any rate, medical science, and a thorough medical education, seem to afford the only substantial security against the evils of empiricism or quackery; and to say nothing of experiments upon the human organism, I have myself seen, under the pretences of remedy or cure, such horrible cruelties practiced upon dumb animals, as have filled me with indignation; and have made me indulge the inhuman wish of changing places with the operator—of putting him in the position of his unhappy patient, and of being allowed to try some of his prescriptions upon himself. If they answered, well; but, in many cases, I think he would be past answering at all. The public have reason to congratulate themselves that medical practice is now every where assuming the character of prevention, rather than of cure; and that the truly respectable part of the profession, dropping that profound air of mystery with which they formerly were accustomed to wrap themselves up, and which made one tremble in their presence almost as much as in the presence of the original professor of the black art, now prefer the more simple to the more artificial practice. They seem to be fast learning that Nature, like others of the sex, may be persuaded but not forced; may be kindly led, but woe to the man that attempts to drive her; and that, in truth, the great object of medicine is, not to give health, but to remove disease; to clean and adjust the machinery, and then it will go right of itself, barring accidents, as long as it is in-

tended to go at all.

I have already spoken of the importance of the veterinary art in an economical view. A frightful disease has for some time prevailed among the cattle in England, Ireland and the Continent. I met with one farmer who assured me that he had lost by it, in one season, ninety-seven cattle; and he feared his whole herd might perish with it, for he could find no remedy. Now, there is no hope of any remedy but from the investigations of medical skill and science. We want men, therefore, who, by education, are qualified for, and willing to devote themselves to, the inquiry into the causes and means of prevention of such dire calamities. The epidemic still prevails in England, and on the Continent; and application has been made to the government to check the importation of foreign cattle, lest they should assist in the spread of the disease. Indeed, numbers of cattle are almost every week, as I have reason to believe, brought to Smithfield in such a state of disease as to be fit for no other purpose—and for this they are actually bought—but to make sausages for the poor Londoners. I hardly dare say that this is not to be complained of; but when one sees the extreme and indescribable misery and destitution of many of these poor wretches, apparently irremediable and hopeless, one almost hesitates, in sad desperation, to lament a mode of disposing of them after the Napoleon example of the treatment of his sick prisoners at Jaffa. I almost tremble when I write on such a subject as this. It is indispensable to see in order to believe. I have had the painful, I hope not improper, curiosity to penetrate many of these subterranean hiding-places and dens of misery; and it is my sober conviction that the human imagination cannot exaggerate the physical suffering, and, too commonly consequent upon that, the moral degradation in which many thousands, in this glorious and prosperous country drag out their wretched existence. But I advocate the establishment of veterinary institutions, and the cultivation of veterinary medicine, on the broad ground of humanity; and I hope many such institutions will grow up in America, and that speedily. It is remarkable that, in the disease of one of our domestic animals, medical science has discovered the only effectual preventive for one of the most dreadful scourges which, in the form disease, ever afflicted mankind; I refer, of course, to vaccination.

But these animals have bones to ache, and nerves to feel, as well as ourselves. They furnish our support; they are patient, enduring and indefatigable, in our service. Has not God cast them upon our care, and put them under our protection? What a responsibility! Shall it be said that those who have no voice to speak for themselves, shall find no one to

speak for them? What if they have no moral nature? Then they have not the vices of animals of a superior class, who, dishonoring, perverting and outraging that moral nature, degrade themselves far below the class of beings guided only by instinctive impulses. It is said of the great emperor, that his heart was never more touched, if heart indeed he had, than on a certain occasion when, three days after a sanguinary battle, when human victims were immolated to his dreadful ambition by thousands, riding over a field thickly strewn with the dead and the dying, he found a faithful dog lying by the side and licking the bleeding wounds of his dying master. The noble dog of St. Bernard, dragging the perishing traveler from the snow-drift to the convent, for warmth and comfort, and the poor spaniel dying of slow starvation upon the grave of his master, and refusing to be led away or be comforted, are pictures of heroism and fidelity worthy of a place at the side of Regulus, deaf to the entreaties of his family, taking leave of the Senate on his return to fulfil his pledge, or that of the Grecian daughter, nourishing her father in prison.

Humanity calls upon us to alleviate suffering, wherever suffering exists. I wish that veterinary instruction was connected with all our medical schools, and an indispensable branch of study. We try all kinds of experiments upon these helpless animals for the benefit of science, and science should do something to repay the debt, by attempting, in every practicable form, to alleviate the sufferings of the race. In the country, a medical practitioner, who would add veterinary skill and practice to his other services, would confer immense benefits. It is lamentable, that, by a false standard of moral duty, such an office should be thought degrading. In many cases it might subject him to painful and thankless services; but the life of every benevolent physician is full of such services, and he has only to thank God that he has the power of doing so much good, often at so little cost. So far from such a practice being degrading, the physician who would be willing to render such services would be worthy of double honor, for the more humble, the meaner, the more friendless the sufferer, proportionately is the glory of the kindness enhanced. These is no reason, however, why such services should be gratuitous, and in many situations it would form a profitable branch of practice.—*Colman.*

An eastern contemporary advertises for a horse, 'for a lady of dark color, a good trotter and one of stylish action.' The horse 'must be young, and have a good long tail about fifteen hands high!'

Basket Willow.

The cultivation of Basket Willow in the U. States appears, from the facts which have come to our knowledge, to be a subject deserving serious consideration. It is stated, upon the best information, that the value of the annual importation of the article into this country amounts to nearly five millions of dollars, and that large as the quantity may seem, it does not satisfy the consumption. The supply is derived from France and Germany, and the price paid here ranges from \$100 to \$130 per ton weight. There are three varieties of the plant regarded as best suited for basket making, farming, tanning and fencing. Of these, the *Salix Viminalis*, is most used in the manufacture of baskets, and, under favorable circumstances of soil and culture, an acre of ground will yield at least two tons weight per year, costing, when prepared for market, about \$35 per ton. The next species is the *Salix Capou*, or Huntingdon willow, adapted for basket making, but more extensively employed by English farmers for hoop poles and fencing. When used for the latter purpose, the manner of planting is described to be by placing the ends of the cuttings in the ground, and then working them into a kind of trellis work, and passing a willow withe around the tops, so as to keep them in shape for the first two years. The tops are afterwards cut off yearly, and sold to basket makers, thus obtaining a fence and crop from the same ground. The hurdle fences of England, removable at the pleasure of the proprietors, are also made from the *Salix Capou*. The third kind of willow to which we have reference, is the *Salix Alba*, or Bedford Willow, which is held in high esteem as a shade tree, and very generally cultivated for this use in England. It is remarkable for its beauty and rapid growth—affording a good shade, it is said, in two years after planting. The bark is also much prized for its superior tanning properties, while its wood, from its fine grain and susceptibility of a polish as fine as that made on rose-wood or mahogany, is in extensive requisition for shoemakers' lasts, boot-trees, cutting boards, gun and pistol stocks, and house timber. This, too, is the willow that is chiefly used in England in the manufacture of gunpowder. An acre of the wood, after ten years from planting, has been sold for £155.

As respects the practicability of growing in this country the willows enumerated, experiments by a number of enterprising farmers and horticulturists in New York and other States, has been made successfully on a small scale. The soil and climate of the United States are, in many places, favorable to the cultivation of the plant, and but little care is necessary to bring it to perfection. Those

persons who have engaged in the enterprise, and have experience in the work of raising this species of vegetable for manufacturing purposes, assert confidently that it can be grown profitably in numbers of the States, at \$50 per ton weight. It is also said, upon well ascertained data, that there are hundreds of thousands of acres of land here, either not improved at all, or yielding but a very small per cent. per annum, which could be made, by occupying them with the osier, productive of immense profits. On this point, an intelligent gentleman, who has a practical acquaintance with the subject, says:

'Every farmer will acknowledge meadow land to be poor that will not yield a ton of hay to the acre, which, when cured and in market seldom sells for more than \$12. All men who are acquainted with the growth of willow for market, well know that an acre of land ought to yield at least one and a half tons weight of it. The cost of preparing willow for market would not exceed \$40 per ton. Now, estimating hay at \$12 per ton, and willow at \$120, deducting from the willow \$40 per ton for preparing for market, there is a balance in favor of the willow of \$80 per acre.'

The feasibility of the cultivation in the United States has been, hitherto, and very naturally, decided by importers, who have represented the crop to be liable to damage from flies, and have also alleged the price of labor to be too high to allow of fair, remunerating returns. In contradiction to this, we here cite the testimony of Mr. W. G. Haynes, of New York, who is occupied in the production of the willow for mechanical uses. He says:

'I have grown as good quality of willow as is raised in any part of the world. That taken from two acres, cut last year, yielded me, clear of all expense, the snug little sum of \$333 75. If I had the means, I would purchase lands and plant thousands of acres of willow, and find a ready market for it.'

To convince those who have not investigated the subject of the lucrative nature of the trade, it is sufficient to state that the large importation of basket-willow, made during last summer, by four or five houses in New York, was not equal to even half the demand, which is increasing every day. Furthermore, it has been discovered by one who has industriously collected the statistics, that the amount of money paid for willow baskets alone, in the city of New York, exceeded \$1,000,000, and that the sum paid for baskets shipped to the Southern and West India markets, probably reached \$2,000,000 more. These facts are certainly important, and well worth the reflection of men who are properly situated for embarking in a business which, in all points of view, promises advantages so decided and

great. The native product would always command a sale here, in preference to that imported, by the reason of the cleanness of the crop and its freedom from the bruizing and breakage occasioned by packing in a ship's hold, not to mention that the imported article is the mere refuse of the foreign crop, which is generally carefully picked by the French and German basket-makers, who retain the best qualities for their own manufacture into fabrics subsequently exported to this country.

Besides the inducements which an extensive domestic demand for the willow, holds out for our agriculturists, Great Britain annually imports from the continent a large quantity of it, and there is no reason why producers of the raw material here should not supply the consumption of England as well as of the United States. In short, the project of cultivating the *Salix Viminalis*, and other species of the plant adapted to manufactures, appears worthy to claim the earnest attention of the American farmer; and, in view of the obvious rewards which it would yield his labor and capital, are surprised the subject has not long since been discussed in the agricultural societies of the land, and tried thoroughly, by liberal and enlightened experiment. It is not yet too late to render it a valuable source of private and national revenue.

From the Graute Farmer.

Agricultural Features of Portugal.

[MR EDITOR:—I send you an extract from a letter written by a friend now residing in Portugal. The matter contained in it will undoubtedly interest your readers.—E. D. SANBORN.]

LISBON, Feb. 20th, 1852.

MY DEAR SIR:—Portugal is a small state,—a feeble folk,—but it has a romantic history; and even now, after years of decline it has very striking features. Not much larger, I suppose than Vermont and New Hampshire, it has nearly four millions of inhabitants. It is a country of hamlets,—villages,—even over the comparatively sterile counties of the coast, between Lisbon and Cintra, we pass through a series of towns. Agriculture is the employment of a large part of people. It is still, however, rude. The plow in use here is very like the old Roman. The beam is a rough-hewn crooked stick, long enough to supply the place of a chain, and actually passes into the ring of the yoke. Upon this beam, a crooked stick is fixed, by mortice, at an acute angle; to answer the purpose of a coulter, share, and mould-board. The end of the coulter, in the better sort, is of iron sharpened. A handle is made by letting in a stout piece of wood upon the upper scale of the

beam, making an opposite acute angle with it. If more than one yoke of oxen is employed, and I have seen four yoke plowing wheat stubble, they are connected by ropes, instead of chains. Of course a furrow is not turned, the earth is only loosened. Sometimes a furrow is made only once in four or five feet and men with hoes draw it over the intervening space, and smooth it down, leaving the field in wide ribs. The oxen are beautiful. I saw some fifteen hundred yoke at a Fair in October, and I do not think I ever saw so many fine cattle together anywhere else. The harrow is made by uniting three or four sticks of hard wood by cross pieces at their ends, and driving them into short pieces of iron bars, about two inches by three-fourths of an inch. The plowman, if there be no driver, carries a fine pole, twelve or fourteen feet long, with the small end pointed with iron; if there be a driver, he carries a shorter instrument of the same kind; he walks by the side, either side, or in front, of the cattle; stands between their heads, and goads them in the shoulders or the sides; or turns them about by means of a hide strap, fixed to the yoke and fastened to one of the horns. They are so perfectly trained that they are as harmless as kittens. So, also, are the cows, women lead them by the horns, as children lead a pet lamb. In rainy weather the oxen have a cloth like India rubber covering their shoulders and loins. The cows, driven into the streets are generally blanketed. They come attended by the calves and are milked at the door of the customer. I was, last week, at Cintra; we passed one field of rye fully headed; the wheat was generally about a foot high. In the English Minister's garden, I saw peas, lettuce, onions, cabbages, &c., just fit for use; he has had pease green all winter. Roses, geraniums, japonicas, hyacinths, and pinks are in their perfection, and so, indeed, most of them were, in June. I am writing without a fire, and have had none in my study this winter. Such is this land of sunshine and flowers. We do not know what cold is. We breakfast at nine, read and walk until four, dine at that hour, and resume our avocations in the evening, have a cup of tea at eight and go to bed at eleven. Calls are made from one to four. Evening parties are frequent from December to Lent,—this year, Feb. 25,—the rest of the year there is very little visiting.

Something worth remembering by every farmer.—A correspondent of the Washington County Blade, states some interesting facts in relation to the culture of Flax on fields of partially killed winter wheat. He says:

Flax seed can be sown with advantage on fields of winter-killed wheat. It should be sown early in the Spring, as soon as the ground will permit, (early sown seeds the best) at the

rate of about one-half a bushel to the acre—more or less, according to the extent the wheat is killed—and then the ground should be well harrowed and rolled. The flax seed ripens with the wheat, the flax and wheat, or course, are cut and bound up together, and when threshed the seed runs into the chaff box, so that it is easily separated from the wheat.

This practice of sowing flax seed on winter killed wheat, has been tried to a considerable extent by farmers in Genesee county, N. Y., and with profit. The writer cannot state particularly what has been the yield, except that he knows of one case, in which the farmer got ten bushels of flax seed, and at the same time six bushels of wheat, on ground where he had a crop of corn the years before.

CURRENTS AND GOOSEBERRIES.—It is to be presumed that not one in a hundred understands the simple process of cultivating either currants or gooseberries, although it has been detailed in all the horticultural books with which the world abounds. Thousands of persons, with every appliance for success, are still content to live without a plentiful supply of these delicious, healthy, and cheap luxuries, merely because they have not thought of the matter. They have a few stunted bushes set in the grass, with three-fourths of the stocks dead, and then wonder why they do not bear in abundance.

There is not a more beautiful shrub growing than the currant, properly propagated; and the same may be said of the gooseberry. Cultivators who pay any attention to the subject, never allow the root to make but one stock, or, as the English say, 'make them stand on one leg,—thus forming a beautiful miniature tree.

To do this you must take sprouts of last year's growth, and cut out all the eyes, or buds in the wood, leaving only two or three at the top; then push them about half the length of the cutting into mellow ground, where they will root, and run up a single stock, forming a beautiful symmetrical head. If you wish it higher, cut the eyes out again the second year. I have one six feet high. This places your fruit out of the way of hens, and prevents the gooseberry from mildewing, which often happens when the fruit lies on or near the ground, and is shaded by a superabundance of leaves and sprouts. It changes an unsightly bush, which cumbers and disfigures your garden, into an ornamental dwarf tree. The fruit is larger and ripens better, and will last on the bushes, by growing in perfection until late in the fall.

The mass of people suppose that the roots take out from the lower buds. It is not so—they start from between the bark and the wood, at the place where it was cut from the parent root.—*Vermont Chron.*

Agricultural Bureau.

We have received a speech of Hon. Eben Newton, of Ohio, in the House of Representatives, April 20, 1852, in favor of the establishment of an Agricultural Bureau, from which we make the following extracts:

Its origin.—The great and primary object of this bureau, is to elevate the social condition of the agriculturist, and increase his means and facilities for improvement. That this is necessary, all will admit. We need not go beyond our Hall to see how few farmers are selected as national legislators. Look to your professions and mechanics, and see their skill and productions; then cast the mind of the nation, in the person of its Representatives, over the country; let each Congressional district be examined, and see how few model farms are to be found, and how few prize articles are possessed. See how few farms that may not be greatly improved, in price, value, and productions. Look to your agricultural products that are sent abroad, and see how many are branded as unmerchantable, or second rate, and compare the general reputation they bear abroad with our mechanical inventions and improvements, and the answer can better be understood than expressed. It is the sentiment of every patriot, that 'it should be the study of every statesman, and the primary object of every legislator, to elevate the agricultural interest. It can never be done in any other way than by the action of the nation; it never has been in any other country, and never will be in this. There are in all revivals, religious or political, times of declension, and unless there is some general power above and below to guide and sustain them, they will fade away. Here the science can be concentrated and diffused by the national Representatives. Let the farming interest see that the General Government will give them any aid in this great movement for advancement, and you will electrify all their efforts, and warm into life thousands of others. Repulse it, and you freeze that which is now alive.

The Patent Office inadequate.—But I am told there is a Patent Office, and the farmers are abundantly enlightened with the crumbs that fall from its table. The Patent Office until 1831, during General Jackson's administration, when he called Mr. Ellsworth to it, was a burlesque, and is now, upon farming, compared with the wants of this great nation. Mr. Ellsworth was a practical farmer; but he had all to do, and nothing to do with. He was the first in that office to give any attention to agriculture. But the first appropriation for that object was in 1839, \$1,000, for collecting agricultural statistics; in 1842, \$1,000; in

1843, \$2,000; in 1844, \$2,000; in 1845, 3,000; in 1847, \$3,000; in 1848, \$3,500; in 1849, \$3,500; in 1850, \$4,500; in 1851, \$5,500; total, \$29,000 in seventy-five years. The cost of printing is not included, and cannot be ascertained, as the report of the Commissioner was all published in one volume until the last two years. What can this small pittance do for this great nation? Scarcely enough in one year to defray the expenses of correspondence.

The fund is to be distributed by the Commissioner of Patents, who is not selected for his knowledge of agriculture, (whose main business is a different character, and more than he can do,) and may or may not be acquainted with it. The business must therefore be done by an unaccredited agent. Where is our agricultural department? Pent up in the cellar of the Patent Office, and cannot be found at mid-day without a candle; and when found, a single clerk struggling to get up that report. When it is up and out, there are but four hundred volumes for each Congressional district of one hundred thousand population, and that a reading people; and there is more call for this document than all others of a public character, and fast gaining in reputation from editors over the Union, and the public generally, inadequate as it is.

Other countries compared with our own.—There is no country where the mind is so inquisitive and information so generally desired and possessed as in America. Travel over the whole world and return, and the truth is seen and felt more palpably. To us the masses of the world are looking for improvement, physically and morally, and for it they seek us in thousands daily. In the United States there but about thirty agricultural periodicals published and there are five hundred thousand copies taken and read by the people—a mere drop to the ocean. There are agricultural journals in the State of New York that have six times greater circulation than any single paper of the kind in Europe. This only shows how great the thirst we ought to assist in gratifying. In America there is not an agricultural school aided or patronized by the government; and, in fact, it may be said, there is none at all. Some are just beginning to struggle for life, but the faint, feeble feelings of the General Government infuses itself into every part of its great family and paralyzes the whole body. There is not what may be regarded as a text-book in any branch of agriculture or rural economy in America.

Compare what America as a nation has done with what has been done by other nations. I can but glance at it. Russia has in all sixty-eight schools and colleges. She has an agricultural institution with forty college buildings, occupying three thousand acres of land, and attended by several thousand students.

The Agricultural Societies of St. Petersburg was established by Queen Catharine. There are under the patronage of the French Government seventy school farms, besides five first-class colleges, in which professors are employed to lecture on botany, zoology, chemistry, agriculture, and the treatment of diseases in cattle; on the culture of woods, forests, &c. These are supported throughout the country. National establishments for the improvement of breeds of stock, and colleges for the education of veterinary surgeons, and investigating the use of all discoveries contemplated for agricultural improvement. The Government expend in three veterinary schools a year for instruction 754,200 francs; for instruction in agriculture, 700,000 francs; for improvement in the breeds of horses and science connected with it alone, 1,776,400 francs. The requirements for admission into these veterinary schools are as follows: The applicant must be not less than seventeen years of age, and not over twenty-five, and have the qualifications: to be able to forge a horse or ox shoe after two heatings—pass an examination in the French language, arithmetic, and geography, and after four years' study, is permitted to practice veterinary surgery, and receive a diploma. In Belgium great attention is paid to the subject. There are an hundred agricultural schools or colleges established by the Government—a high school of veterinary surgery. The science of agriculture is the most fashionable in the kingdom. They have their palaces furnished more or less with rare specimens of the product of the land, and are farmed like a garden. These facts I know, having traveled over considerable part of that country. In Saxony they have five schools; in Bavaria thirty-five; in Wurtemberg seven; in Austria thirty-three; in Prussia thirty-two; in Italy two; in Scotland two; in Ireland sixty-three. The one at Glasvenin; near Dublin, I visited. It now consists of one hundred and twenty-eight acres of good land, and convenient buildings, and are about to add to their farm, and increase their buildings so as to accommodate one hundred or more students. With the teacher, Mr. Donaghy, I became acquainted. He is an intelligent, practical man. With him I viewed the farm, and their farming and buildings, &c.; and it is carried on very successfully. These schools are doing more for Ireland than any other attention the Government is giving them. They have colleges and agricultural schools in England, sustained by the government—some four or five with large farms attached to them—where all the sciences connected with the general business are taught with great perfection, and millions of money each year invested in the general science of agriculture by the nation. It is an investment and not an expenditure.

Other countries are engaged in the same business, but I cannot go further into detail. Sufficient is said to draw a parallel between their views and ours. Abroad they invest millions each year, in a country not larger than an average of our States. Here, in all our country, for seventy-five years, for the general object we have expended \$25,000.

GOOD DAIRY FARMS.—The best farms for making butter are those that lie fair to the sun, where the feed is sweet and of the best quality. Butter made from good sweet feed, will be of good color and of superior quality to that made from feed from pasturing that lies on the north side of the hill, where the sun shines but very little. The land is cold and wet, and the feed is sour and of poor quality, and the butter made from it will be light colored and of inferior quality to that made from good rich sweet feed. Dairymen should have plenty of good clear water, where the cows can have free access to it at all times. When the cows are obliged to wade in the mud for water and drink when there is a scanty supply, and drop their excrements in it, they are obliged to drink an impure mixture, that greatly affects the butter.

Cows should not be allowed to lie in close yards, in very warm weather; they should be returned to the pasture, or some convenient place where they have a good place to lie, and fresh air. When cows lie in wet and muddy yards, there will be more or less dirt fall from the cows into the milk, while milking, which gives the butter a very unpleasant flavor. All kinds of feed that are of a strong nature, such as turnip and onion tops, and vegetables that have a strong flavor, ought to be avoided, for it is injurious to the flavor of the butter. In the spring every dairymen should feed his cows with a little Indian meal and water every day for two or three weeks before they come into milking, and from that time until they can get a good supply of grass. This not only improves the condition of the cows but greatly increases the quantity of the butter, and improves its quality.

Dairymen should never undertake to keep more cows than they have plenty of feed for. Twenty cows, well fed, will yield much greater profit than forty poorly kept. Every farmer should be very particular to select such cows as give the richest milk, and that which will make good yellow butter. Every one knows that it is no more expense to keep good cows than it is poor ones.

To have good cows and plenty of good feed; pure water, comfortable barns in winter, where they can be kept dry and warm, and good clean places for them in the summer, is the first step towards carrying on the dairy business successfully.

From the New England Farmer.

What Kills the Peach Buds?

BY H. F. FRENCH.

MR. BROWN:—Mr. Downing and many others of our best horticulturists, say that when the thermometer falls lower than about 12° Fahrenheit, the peach buds are generally destroyed and that, too, as I understand it, by the mere stress of weather, the mere intensity of cold. I have always looked upon this idea with suspicion, because it has seemed inexplicable to me, that any change should occur by any greater degree of cold, if the buds are not affected when the mercury is at zero. Water freezes at 32°, and the sap in the small twigs of the peach tree, I suppose must be frozen, long before the weather is the zero. We all know that water as it becomes solid, expands by crystallization, and we can readily comprehend that such expansion may rupture the sap-vessels of the wood or bud, and so destroy it. If this is the cause of the destruction of the buds, then it should happen whenever the sap freezes. Now I will not undertake to affirm that the sap in the peach does freeze until the thermometer reaches 12° below. It is possible that there is in the sap of the peach and in the incomprehensible phenomena of its circulation, a power of resistance to cold, sufficient for its protection to that degree. I speak cautiously on the subject, because there is no theory of the circulation of the sap, which is perfectly consistent with known facts, and I set the subject down among the matters not fully revealed. The circulation of the blood of animals generates heat in some way, and possibly the circulation of the plants may do the same. But generally, this does not seem to be so, for all of us who have split cordwood in the winter, know that in weather not so severe as we speak of, the logs appear to be frozen solid, and will fly open at the blow of the axe, like blocks of ice, and show the frozen sap, sparkling like diamonds.

After the sap has become solid, does it undergo any change by the increased intensity of cold? If not, how it is supposed, that a degree of cold 12° below zero kills the buds, when 5° below does not? Although there seems to be a good deal of evidence that Mr. Downing and his friends are correct as to the fact, in the more southern latitudes, yet it is otherwise at the North.

Within the past fortnight, I have examined the peach buds on many farms in the eastern part of New Hampshire. My own, and those of most of my neighbors, on the sandy plain, are all destroyed. We had the thermometer 20° below.

At Stratham, on several farms, they are nearly all destroyed, and on others most of them are injured. The degree of cold was more

than 12° below at all those places, and I can discover no reason for the difference.

I was at Derry, at the nursery of Samuel Wilson, yesterday, and examined a great many peach trees, and they are perfectly sound and fresh, except upon one or two varieties of tender trees, which Mr. Wilson said, usually suffer. His thermometer he saw 18° below, and others near went down as low as 22° below, and his peach trees within two rods of where the glass was kept, are full of fresh sound blossom buds. He has trees on the south side of his house, in warm exposures; others on the north side of hills, and others on the hill tops, and they are uninjured, with very slight exceptions. Mr. Wilson is known as perfectly reliable, and assures me that his peach crop has never failed in any instance for many years, and the cold is generally greater than 12° below, every winter. His opinion is, that the buds are destroyed, usually in autumn, by sudden cold weather upon trees on moist or rich land, where they grow late in the season. With no theory of my own to advocate, I am desirous to keep our readers posted up as to the facts, that by-and-by we may be able to draw the truth out of the well, in which the old proverb truly says, she lies.

Yours truly, H. F. F.

Salt in Peaches.

Mr. Lemuel Moss, of Portsmouth, related an experiment made by a lady of his acquaintance, who having heard that salt was good as manure, poured some brine at the root of a peach tree. In a few days the leaves began to turn yellow, and to fall off, and in a few days more the peaches shivelled up. A few alone remained on the tree, and the lady relating the circumstances requested Mr. Moss to taste them. They were salt almost as if they had been in the brine.

The roots had taken up the brine, and it had gone into the circulation of the tree, but so much dissolved as to destroy it.

Guano, urine, salt, and some kinds marl, may be applied so abundantly, as to destroy vegetation while a little would be highly useful.

Chamber slops, so universally thrown to waste contain all the elements necessary for food to plants, and those who have tried the experiment with them have been surprised at their astonishing growth produced by a small quantity being sprinkled on the ground around growing plants.

Some chamber slops thrown at the root of a peach tree by Mr. Moss, increased greatly the size and flavor of these peaches, giving them a richness before unnoticed; and in subsequent years, when the experiment was not renewed, the peaches were far inferior in size and in richness of flavor, so that they would scarcely

have been recognized as the same kind of fruit.

In a little nursery of peach trees, in 1851, the Editor of this paper occasionally treated the small trees with about a teaspoonful to a wine glass full of a mixture of wash-water and urine. The trees grew astonishingly, so that by one year's growth they were all large enough to set, and were set in an orchard. Many of them were six feet high, and most of them were five feet.

Some apple, and cherry, and plum trees, of larger growth were also fed in the same manner, and grew, so that many of the twigs of one year's growth were from three to five feet long.

Urine, applied in small quantities to plants and trees is highly useful manure, and generally promotes the growth and development of all parts, but seem to be most beneficial while the fruit or seeds are being formed.—*Western Ariculturist*.

The Curculio.

A gentleman says, take cotton batting, put three circles 6 to 12 inches apart around your plum trees. He caught 60 in the first circle in 24 hours; in the second circle but few had been caught; in the third circle, scarcely one got so high. He found this a sure preventative, and got lots of fine plums last year for the first time for many years.

My practice has been to pay the children six cents a quart for all the windfalls and keep the ground clean. The wind falls contain the maggot, (as with apples and all other fruit,) from which they go into the ground, and the curculio is propagated. I found this course to be of service, and got large quantities of plums.

Combine the two practices, and it will be found better than all the theories of Horticultural Doctors.—*Manchester Democrat*.

'A LITTLE FARM WELL TILLED.'

We have seldom known a better illustration of this expression, than is given in an account of a farm of fifty six acres, belonging to ERASMUS LITTLEJOHN, of Middlebury, Mass. This Farm was entered for the premium offered by the Plymouth county Agricultural Society. The premium was offered in 1848, payable in 1851—reference being had to the products of the years inclusive. The 56 acres consist of 22 acres improved land, 12 acres unimproved (now mostly planted to forest trees,) and 22 acres of woodland. The soil of the cultivated part is described by the committee who examined it, as mostly sandy and gravelly except several acres of swamp, which have been brought into excellent meadow. Since 1848, he has raised on the 22 acres comprising the

cultivated part of the farm, 488 bushels of Indian corn, at an average cost of 21 cents per bushel; 51 tons of hay at the cost of \$4 per ton; 484 bushels of potatoes at 22 cents per bushel, 'besides other vegetables.' The report states that the net yearly profit on his farming operations, after deducting interest on the cost of his farm, labor, &c., were in

1848,	\$561 54
1849,	582 31
1850,	610 81
1851,	810 92

A daily account has been kept of every item of expense on the farm, and credit given for products at their market value or realised sales.

SCARE CROWS.—Mr. Joshua Woodward, of Haverhill, N. H., gives the following in regard to the prevention of corn from injury by crows:

When the corn is planted, or some time before it comes up, I place small poles, from ten to fifteen feet long, perpendicularly in the ground on the outsides of the field about six rods apart, with twine extending from the tops of them, inclosing the field. If the field is large I endeavor to have the lines so high and so near each other by cross lines, that whenever a crow lights on any part of the field, he can see the line above the sensible horizon. I have found by watching, that crows never attempt to pull corn after they light in the field, until they have examined the premises to know whether they are safe. The sight of the line after they have lighted on the ground seems to alarm them, for they leave forthwith, without taking any refreshment, although ever so hungry. I have practiced lining corn for more than thirty years, and after it has been done as I have stated, have never to my knowledge, lost a spire by the crows.

A NEW PLOW.—Mr. Hamilton Roney, a farmer and a blacksmith, living some four or five miles west of Monmouth, informs us that he has lately invented a plow much superior to any one now in use. Its model is entirely new; and to convince farmers and others of its practical utility, Mr. Roney informs us that he made a public exhibition of its excellency, at his farm on Saturday last.

The plow is of cheap construction, and two horses can break prairie with it with ease.

Should this plow meet the approbation of the public, after a fair trial, it is the intention of Mr. Roney to procure a patent upon his invention, and donate the right of making and using for the State of Illinois, to aid in building the Peoria and Oquawka, railroad and after the road is completed, the income of the stock to be applied to the use of common schools in

every county, in proportion to the sum paid by each county for the patent right.

Thus it will be seen that Mr. R. is willing the public should have the entire benefit of his invention, be it much or little, and we hope all interested did attend the exhibition, and witness the performances of the new invention.—*Monmouth Atlas*.

Value of Cobs as Food.

C. D. Bent inquires if there is a 'certain flinty indigestible substance contained in cob-meal, or meal made from the ears of corn, that is very injurious to horses and cattle as a constant food.'

We have heard intelligent farmers say that they would as willingly give horses fragments of pounded glass mixed with their food, as to feed them with cob-meal, on account of the small 'flinty' pieces it contains. This is no doubt too strong a view of the case, for we have known such food given regularly to working horses for successive months, not only without producing sensibly any bad results but they continued in as good order as on other food. Those 'flinty' portions, however are an evident annoyance to them, and if mills which grind corn in the cob, had a course sieve attached, for removing the coarse portions, the meal would doubtless be more valuable than that of the grain merely, from an equal weight of ears. Cattle possessing more powerful digestive organs, do not appear to regard those objectionable portions.

According to Dr. Salisbury's analysis, the weight of the cob is about one quarter of that of the grain, and they contain about one half as much sugar for a given weight, as the latter. Their ashes contain a much larger proportion of potash, than that of grain. But the chief constituent of the cob is woody fibre, forming about three fourths of the whole, and it is the harder parts of this fibre that constitute these 'flinty' lumps, so called which are deemed most objectionable. But this fibre is not wholly without its use in going to support respiration and sustain animal heat, according to the well known principles of animal economy. Hence, though not rich in nutritive matter, the cob may be regarded as possessed of some value, the only object required being the removal of the harder portions, as already suggested.—*The Cultivator*.

THE BOY AND THE BRICKS.—A boy hearing his father say, 'twas a poor rule that would not work both ways,' said, 'If father applies this rule about his work, I will test it in my play.'

So setting up a row of bricks, three or four inches apart, he tipped over the first, which striking the first caused it to fall on the third,

which overturned the fourth and so on through the whole course, until all the bricks lay prostrate.

'Well,' said the boy, 'each brick has knocked down his neighbor which stood next to him; I only tipped one. Now I will raise one, and see if he will raise his neighbor. I will see if raising one will raise all the rest.'

He looked in vain to see them rise.

'Here, father,' said the boy, 'is a poor rule, will not work both ways. They knock each other down, but will not raise each other up.'

'My son,' said the father, 'bricks and mankind are alike, made of clay, active in knocking each other down, but not disposed to help each other up.' He added a

MORAL.—When men fall, they love company: but when they rise, they love to stand alone, like yonder brick, and see others prostrate and below them.'

CHEAP DRAINING.—It is stated in the foreign correspondence of the *Michigan Farmer*, that a method of cutting drains has been adopted in Scotland, requiring much less cost than formerly, being all done with the plow. It is very useful in all cases where the ground is clayey and tolerably free from stones. 'In the first place a common plow is passed back and forth, turning a furrow out on each side. Then follows the draining plow, which goes down from two to two and a half feet, the mould-board being so formed as to turn the earth all out. In this manner, twelve acres in the vicinity of Sterling was drained with three plows in one day, the tile being laid in the furrow just as the plow left it. The earth was returned to the ditch by means of a scraper, in the form of the letter V, the legs of course protruding forward, and a team attached to each leg, on each side of the ditch.' We have been long since satisfied that the cost of excavating ditches might be more reduced by more horse labor than is generally used. For instance, let a large Michigan subsoil plow with ample team be set in a foot deep, a thing very easily done; by throwing a furrow each way, (leaving but a narrow strip in the middle) the first foot of the ditch is at once thrown out with sufficient rapidity to prepare some miles for the spade in each day. By running twice each way, a greater depth and more perfect work might be attained. A regular and thorough system of draining is at present quite expensive, costing some twenty-five or thirty dollars per acre; and if its cost could be reduced one half by the application of horse power, it would greatly contribute towards its general introduction,—and be worth millions to the country, laying as it does, at the very foundation of successful farming.—*Albany Cultivator*.

Agriculture in Minnesota.

We have but little farming yet in our Territory; but we have more and better inducements for that business than any other country can boast.

1. A better climate; in which the labor of one man, will produce more, yield a larger surplus above his own necessities, than any other Western State or Territory can boast of. We have none of the languor and debility and agues, that turn men into feeble women, in the harvest field, as they have south of us. Labor here, stands up firmly on its legs, the year round, and drives things through.

2. We have as good land—it is useless to say better—but as *good* as there is in the world. For fertility, Cottage Grove prairie, or the whole valley of the Minnesota river, or the valley of the Red river of the North cannot be beat—yes, we undertake to say that at Pembina, in latitude 49°, North, they can raise as sound corn, and as much per acre, as can be raised any where on the Wabash. Now, if our readers are not going to believe us, let them stop short here; for we are prepared to make a wager, that we will raise larger and better crops, in Minnesota, acre for acre, of any or all crops ever cultivated in that State, than can be raised in Illinois. We will name our farmer, living here, for our champion, and will back him up with our money. There is time enough. May is soon enough here. We will give Illinois May the start, and Minnesota shall come out ahead. Don't care what the crop is—any grain, any root—any thing from a castor bean or an apple or pear tree or a pumpkin to a sweet potato or a tobacco plant. Why sucker, do you know you have frosts about two weeks earlier in Illinois, than we do here? It is a fact! The Ramsey County agricultural Society will go into operation this season; and we will show these people *sights*, who come up here in May, and go shivering back home, saying that Minnesota is 'too cold for crabs.' We can beat them, too, at stock-growing, can raise hardier cattle and sheep and thicker meat, sweeter beef, than they can any where down south. We feed stock a fortnight longer, but what of that? Our cattle are healthier, our grass is sweeter and more luxuriant and our water better for stock; and we can make more at raising stock here at the same prices. But we have larger prices here, for meat and for all produce—and always must have, having soldiers, lumbermen and Indians to feed and make us a home market. The cost of shipping produce from below, operates as a tariff to protect our farmer. He gets the same price he could below, and the cost of freight and charges beside.—*Pioneer*.

Strive and thrive, activity keeps a man alive.

Improvement of our Common Stock.

There is perhaps no one branch of agriculture which more needs improvement, or which would become productive of greater profit to the agriculturist, than that of neat cattle; and it is gratifying to observe some little interest awakening in the minds of farmers generally, to this important branch of their profession. Improvement has been confined too much to the more wealthy; and the man who has been the most liberal in his expenditures to benefit the country in this particular, has not unfrequently met with the ridicule of his neighbors. But happily for such—more particularly for the country—public opinion is undergoing a change, and those who once opposed improvement, are now in some degree availing themselves of its benefits.

That our improved breeds are greatly superior to the common stock of the country, I presume no one will deny. This being conceded, it becomes a matter of no little importance to ascertain in what manner we can the most speedily avail ourselves of the means within our possession for the improvement of our common stock. It is evident that we should seek a cross with some of the improved breeds, the relative merits of either of which I do not propose here to discuss. Every individual, before making choice of any particular breed, should carefully examine the subject, take into consideration his locality, and, more particularly, should consult his own taste; for unless fully convinced in his mind that some particular breed is the best, he will probably make but slow advancement. Having made choice of the breed, it is evident that he should then seek to engraft its characteristics and good qualities upon his own stock. And here allow me to say that the farmer not unfrequently makes a great mistake. He procures perhaps a few half-breed heifers, and a male animal of the same grade, and commences breeding. Where is the chance for improvement in this selection? It is true that he may select from year to year his best animals, and thus advance slowly; yet the *grade* remains the same; or perhaps, (which is more frequently the case) he procures nothing but a half-bred male animal, and with this intends to make great improvement. The first cross by this animal from our common cows would be but one-fourth; this produces again, in like manner, one-eighth, and the next only one-sixteenth of the blood of the pure-bred animal, and so on deteriorating in the same proportion with each successive generation. It is perfectly plain that he has taken wrong view of the subject, and that his improvement (?) will soon end where he commenced. The most speedy and successful improvement, therefore, can only be obtained by the se-

lection and use of a *thorough-bred* or pure-blooded male animal.

The Valley Farmer.

EPHRAIM ABBOTT, Editor.

Editor's office and Printing office, Third street, corner Pine

ST. LOUIS, JUNE, 1852.

The Law of Newspapers.

1. Subscribers who do not give express notice to the contrary, are considered wishing to continue their subscriptions.
2. If subscribers order the discontinuance of their papers, the publisher may continue to send them till arrears are paid.
3. If subscribers neglect or refuse to take their papers from the offices where they are directed, they are held responsible until they have ordered them discontinued and settle their bills.
4. If subscribers remove to other places without informing the publisher, and the paper is sent to the former direction, they are held responsible.
5. The courts have decided that refusing to take a paper or periodical from the office, or removing and leaving it uncalled for while in arrears to the publisher, is evidence of intentional fraud.
6. Any person who receives a paper and makes use of it, whether he has ordered it sent or not, is held in law to be a subscriber.

We see an effort is being made on the part of some of our brethren of the Agricultural press to give out the idea among farmers, that a system of culture proper to be adopted in one State may be very improper in another; or, in other words, nothing but an Ohio Journal can be adapted to the use of the Ohio Farmer.

To our numerous friends we must say that this is a *grand mistake*. The great and fundamental principles of Agriculture and Horticulture are the same in all countries, and particularly so in different parts of the same country. What intelligent Pennsylvania farmer, who is well skilled in the science of Agriculture, as practiced among the best farmers of Pennsylvania, could be induced to believe that a removal to the State of Ohio would disqualify him for the practice of his profession, and compel him to learn the whole science anew before he would be qualified to hold the plow in Ohio soil? The science of Agriculture embraces a knowledge of every character of soil, from the light vegetable mould to the most impermeable clay; and the science of Agricultural Chemistry teaches the composition of all classes of soils, whether taken from the valley of the Rhine, or from the tributary valleys of our own great Mississippi.

We take this extract from the *Union Artist*. Now, while we agree with every word of it, we must say that it does not touch or come near the argument that the soils and mode of culture proper in one section of our country

and so different from those of others, that the Agricultural papers printed at home are far more valuable, if properly conducted, than those publications at a distance. It is not so much the theory and science of Agriculture which are wanted in our Agricultural Journals, as it is the practical application of that theory and that science to the peculiar locality or individual necessity of the reader.

The 'Valley Farmer,' the May number of which we have just received, is published at St. Louis by Woodward and Abbott at one dollar a year. The paper is now in its fourth volume; and has been regularly increasing in interest and importance till it rivals any of the agricultural papers, and we should be glad to see it generally patronized all over the State. By the way, we notice one of our best articles—Horticulture—copied into it without any credit.

We clip the above from the *Brunswick*, one of our best local exchanges. In regard to his 'best article' we plead guilty. We cut it from his columns, and neglected to attach to it the credit at the time; and when we came to use it, we could not tell for the life of us where it came from. But we now cheerfully give credit to the proper source.

FRUIT.—In Southern Ohio and Indiana, the prospect for fruit is represented as being poor indeed. The extreme cold of the past winter destroyed effectually the germs of the peach and apple in many sections of the country. The Missouri orchards contain as fine specimens of fruit as any others in the West, and we are glad to learn that the same blighting influence has not extended in that direction.—*St. Louis Republican*.

The Boonville Observer says: 'It was generally believed that the embryo peach had been entirely destroyed by the intense cold during the winter. The last four warm days have proved the contrary, and, as the trees will not be over burdened as usual, the fruit will be of superior size and quality. The theory that the bud of the peach will not survive at 15 deg. below the *Cypher*, will not hold good here. During the severe cold spell in February, the thermometer stood at 20 deg. below Zero.

When this theory was broached last winter by a writer in the *Republican* and subsequently by the *Horticulturist* we expressed our unbelief of its correctness. We have not changed our opinion yet, and we believe the experience of the coming season will demonstrate

that we are right, and that for once the *Horticulturist*,—though usually very correct—was in this case mistaken.

We think the peach crop will be very small, this season; and quite likely the severe cold of last winter may be the cause—but what we contend for is that if fifteen degrees below Zero will necessarily kill the peach buds five degrees below will do the same thing. And it may be after all that the cause of the failure may be justly attributable to the same thing also.

SNOW BURNING.—Under date of April 7, Dr. Kennicott writes to the Wisconsin Farmer:

'The sweet spring time—the busy spring time—the conception of faith, and the birth of hope in horticulture,—is, or should be here. But, good sooth, 'stern winter lingers in the lap of spring,' and we have a foot or more of well packed snow, above the white snow drops and glittering patches of many colored crocuses, which gemmed the lawn but yesterday—and how can one write of cultivating trees, at such a time?


But first, an accident, to show that such a snow may act as a 'burning glass,' through reflection of the sun.

There was not a cloud yesterday; and my sons undertook to graft some cherries, at standard height; and before they were aware of it, their faces were so miserably burned that they look like patients with confluent small-pox, and can scarcely see, from inflammation of the eyes.'

REASON FOR NOT TAKING THE VALLEY FARMER.—A good friend, not out of the United States, writes, 'I have just been trying to get subscribers to the Valley Farmer, but have failed. The answer is in general, I know more about farming than the Editor does.' And he significantly adds, 'Well I wish you could see some of our farming.' We have no doubt if we could we should see sights.

We don't pretend to know much. In fact we think less and less of our knowledge every day, but then we are an apt scholar, and we do wish some of these wise ones would enlighten us a little on any subjects connected with agriculture. We don't want to know much about politics, but oh, how ardently will we

study instructions upon such questions as relate to our progress as a great community of farmers. Can not some of these knowing ones teach us something, by writing for our paper, and thus not only teach us but thousands of others who are anxious to learn?

 We copy the below a call for the meeting in Boone County, which we find in the *Mo. Statesman* of May 21:

FARMER'S AND MECHANIC'S MEETING.

The Farmers and Mechanics of Boon county will bear in mind that an adjourned meeting will be held in the Court House in this place at one o'clock P. M., Saturday, June 5th, at which the work of organizing an Agricultural and Mechanical Society will be completed. A constitution and code of by-laws for the government of the Society, and an address to the people of the State, will be reported to the meeting. We are glad to announce that Mr. E. ABBOTT of St. Louis, editor of the *Valley Farmer*, will be present and address the meeting.

We therefore hope to see our farmers and mechanics out in full force.

NEW PAPERS.—We have received the *Kentucky Cultivator*, a new monthly agricultural publication from Cynthiana, Ky. It is published at \$1 per year and promises well.

The *New Era*, really a credit to the old North State, turns up at Goldsboro', N. C. It is a handsome weekly sheet, agricultural and miscellany deserves well of the Carolinians.

THE MISSOURI SENTINEL.—Whig in politics, but chiefly literary and educational in character, is published at Columbia, Mo., J. A. Millan, publisher, E. Curtis Davis, Editor. It is a credit to our State and to the beautiful and enterprising town from which it is issued. *En passant*, Col. Switzer *Statesman* from the same town, is one of the papers to our liking, and we are glad to hear is well sustained by the people of Boone county.

ARMY WORM.—We learn from our exchanges, and from conversation with farmers in the country that the army worm is causing great destruction in some localities. The habits and manner of production of this insect is an interesting study and we should like to have some of our subscribers enlighten the public about them; and also the best way to get rid of them, or prevent their appearance.

SEEDING DOWN AN ORCHARD.—Dr. Kennicott, says: 'I asked the question at our North American Pomological Congress, if a man would seed down his orchard, what would he put on? The answer was (by one who knows,) 'Hogs, Doctor, hogs—seed down with hogs—nothing but hogs.'

American Pomological Congress.

In compliance with a Resolution passed by the American Pomological Congress during its Session at Cincinnati in October 1850, it becomes my duty publicly to announce that the next Session will be held in the City of Philadelphia, on MONDAY, the 13TH DAY of SEPTEMBER, 1852. The Congress will assemble at 10 o'clock, A. M., in the Chinese Museum Building, south Ninth street, below Chesnut.

The Pomological, Horticultural, and Agricultural Societies throughout the United States and Canada, are invited to send such number of Delegates as they may deem expedient. And the Delegates are requested to bring with them specimens of Fruit of their respective districts.

Packages and Boxes of Fruit for the Congress may be directed to the care of Thomas P. James, Esq., No. 212 Market street, Philadelphia, should the owners be unable to give their personal attendance.

The various State Fruit Committees, will, on or before the day of meeting, transmit their several Reports to A. J. Downing, Esq., general Chairman of the whole. The Chairman of each State Committee is authorized, where vacancies occur, to fill up the number of his Committee to five members.

W. D. BRINCKLE, M. D., *President.*
Philadelphia, May 1, 1852.

Editors, friendly to the advancement of the Science of Pomology, are respectfully solicited to notice this Circular.

SWEET POTATOE SEED FROM THE BLOOM.—Collin Wood, in *The Plough, the Loom, and the Anvil*, says that he has raised for three years past, sweet potatoes of better quality than usual, in the following way, viz:

'The Yam potato vine blooms in August; in about a month thereafter they form a pod; the seeds are then formed of about the size of sage seed, and of the same color. The pod should be noticed and gathered when ripe, or else they will soon drop. In the spring at the usual time of sowing seed, I sow them in the same way I sow cabbage seed; they will not come up quite as soon, but will continue doing so through the spring. The plant is small and delicate in appearance, and should be drawn in a wet season, with a little dirt attached to it, and transplanted. The leaf and vine have

a different appearance, and the potatoe will be found to grow larger and smoother.

'I prefer this method, after satisfactory practice, to raise the potatoe than any other.'

DOGS.—The editor of the *'Plough, Loom and Anvil,'* thus discourses of dogs:—'If it be within the power of those who are to give directions about the next census, we hope that they will take measures to ascertain the number of dogs, male and female, in every county in our Union; and if it could be done, it would be useful also to have a return of the number of sheep killed by dogs. At two cents per day, it is probable that the cost of dogs is equal to the value of our export of grain and provisions to England this year; and it is not improbable that our sheep husbandry would add as much to the wealth of the country, if it were not for the fear of having the sheep destroyed by dogs. We are no enemies of dogs, of genuine blood, kept and used for their legitimate and appropriate purposes; all such would ever find in us staunch friends and defenders. But we have a great aversion to idle, useless whelps—'nati consumere fruges' born only to consume the fruits of the land—whether they go on four legs or two.'

The exhibition of the industry of all nations in New York promises to succeed. Among the articles sent from England, to be placed in the collection, is a carpet from Halifax, which, the *Courier* says, bears off the palm of anything of the kind yet seen in the country. It measures six yards in length and five in width. It is of Mosaic pattern, and so exquisitely wrought that the beholder instinctively regards it, as a richly grouped painting on canvass.

SPORTING.—Mr. John Patridge of this town, killed on Tuesday, of this week, seventeen crows at two shots. Mr. P. informs us that two or three years since he procured some carrion and distributed it in a straight line at intervals of a few feet, this attracted the crows in great numbers. He succeeded in one day, with six shots of an old musket, in capturing 76 crows, at one time killing twenty. The above facts are reliable.—*Culturist and Gazette.*

REMARKS.—Mr. Patridge had better have blasted rocks with his powder, and made an aqueduct pipe of his old gun, than shot the crows with them. In the 'dark ages,' some years ago, New Hampshire, and we believe Massachusetts was equally enlightened, offered a bounty on dead crows; but after paying out some thousands of dollars, found out that they had offered a premium for the scalps of some of their best friends! and very wisely repealed the law.

'We often mistake our friends for foes.'

N. E. Farmer.

ty, and surrounded, as every house should be with trees, vines, and shrubbery, we consider it in bad taste to paint with any color darker than a French gray. To prepare this, all that is necessary is the addition of a very small quantity of black, finely ground, and of Venetian red, sufficient give it the slightest possible tint. This, darker or lighter, to suit the fancy of the owner, renders it unnecessary to give any other color to the trimmings, presents an agreeable and sufficiently subdued appearance to the building and contrasts finely with the foliage.

A few words now as to the best mode of preparing paint, principally white lead. And here we speak from actual experience, and therefore with considerable confidence. Pure white lead, by its chemical action on the oil, will lose its body, or adhesiveness, in a few months when exposed to the weather, and should never be used alone. We shall not attempt to give the reason for this—we only state the well known fact. Where three coats of paint are to be applied, we should recommend, for the first, a mixture of Spanish white, say one pound to two of the white lead. For the second about one pound to three. For the last use the lead pure or nearly so. Another plan, and we think a good one, is to make use of calcined plaster of Paris, or gypsum, which, when nicely prepared and thoroughly mixed, gives a much clearer color, and better body, and adds greatly to the durability of the paint. One-third, or even one-half the quantity of gypsum to two-thirds of pure white lead, will be found to answer an excellent purpose, and will save considerable expense. These desultory remarks will be followed, in due time, by more extended, and more practical observations, and we close with the suggestion that spring and autumn are the best season for painting.

Ohio Farmer.

PUBLIC SPIRIT IN MISSOURI.—We are pleased to see the people of Missouri waking up so generally to the importance of works of internal improvement. Railroads and Plankroads are attracting attention every where, and that attention does not end in talk. The people only talk to determine, and determine to go to work. We mentioned the other day the commencement of the Pike County Plank Road, intended to connect Louisiana and Bowling-green. A Plankroad to connect Hannibal and Paris is also to be built. The last number of the *Paris Mercury* says:

'Twenty thousand dollars have been subscribed in Ralls county to the Hannibal and Paris Plankroad—\$10,000 by the County Court, and \$10,000 by individuals. The City Council of Hannibal has also taken \$10,000

of stock in said road, and from \$3000 to \$5000 have been subscribed by individuals in that city. Should not this stimulate our citizens to take stock in this road with a liberal hand?'

The same paper says that the County Court of that county, (Monroe,) has ordered a vote of the people to be taken on the proposition for a county subscription of stock to build a Plankroad across the entire county from East to West; and it further says:

'It is in contemplation to form an union between the Hannibal and Paris and the Glasgow and Huntsville Plankroad companies, and the road from the Mississippi to the Missouri rivers. It is also in contemplation by many of our citizens, that so soon as the main stem of the road is completed, to lend their aid in extending branches of said road to various points within the county.'

So the work goes bravely on. What an amazing advance five years will show in this great State of Missouri!—*Evening News.*

We understand that an extensive woollen manufactory is about going into operation in the town of St. Charles. A capital of \$10,000 has been invested in a suitable building, and a portion of the necessary machinery for a commencement. Should the enterprise succeed as well as expected, and a sufficient quantity of the raw material can be obtained it is intended to employ a much larger capital with all the facilities for cleaning, carding and the manufacture of cloth, blankets, &c. The projectors are Eastern men, and will doubtless go through with what they have undertaken.—*Evening News.*

CALIFORNIA FORTUNES.—It is calculated that out of every hundred persons who have gone to California, fifty have been ruined, forty no better than they would have been had they remained at home, five a little better, four something better still, and one has made a fortune. That seems to be a fair proportion of the California adventurers.

CURE THE PIP.—Undoubtedly about these days some of your chickens will have this common chicken complaint. Cure it. Simply by mixing a table spoonful of sulphur with about three pounds of meal for a feed every other day, perhaps for a fortnight.

TO RENDER WATER WHOLESOME.—The alkaline waters found on the plains, and so often found fatal to man and beast making their journey over land to California and Oregon, are said to be rendered entirely palatable and wholesome by mixing a small quantity of citric or tartaric acid, which neutralizes the alkali.

Farming in Southern Illinois.

The Benton Standard has a well written and timely article on the subject of farming and stock raising in Southern Illinois.

It is suggested that the period is at hand when it will be far better for the farmers of this section, if they would let alone (for a few years at least) the raising of Castor Beans and Tobacco, and go to raising Corn, Oats, Wheat &c.; and pay more attention to the raising of stock. In confirmation of this opinion, reference is made to the great change which is about to take place in every branch of business in Southern Illinois. The various lines of railways now in the course of construction must of necessity furnish employment for thousands of laborers, mechanics, &c., who will have to be supplied with provisions and the necessities of life; and which, as a natural consequence will bring up the price of provisions at home. It must raise the price of the necessities of life to a point nearly, if not quite equal to what they are worth at St. Louis. A ready market for all the surplus produce will be created for a distance of from 50 to 60 miles on each side for the whole length of the Illinois Central Railroad; as also along that of the Ohio and Mississippi Railroad; and, if our farmers persist in their present mode of farming, viz: raising little or nothing for the market but castor beans and tobacco, these supplies will have to be brought here from the adjoining States, and the money paid out here for labor, &c., on these gigantic works, will be carried out of the State. The hands employed on the road have no time to raise a crop; they will be paid in cash—they will buy their necessities of life for cash, nearest at home, and for the least money they can.

For these reasons the Standard very properly, advises farmers to let castor beans and tobacco raising alone, at least for a few years, and advises them to plant their ground with corn, oats, wheat, potatoes, &c., and to give special attention to the raising of stock, including horses, mules, cattle, sheep and hogs, and they will enrich not only themselves, but the whole country. There can be no manner of doubt but that those who go into it at once, so as to be prepared at the start, will reap the greatest benefit. In a few years the country will fill up with farmers and others, manufacturing establishments will spring up, and the public works, then complete, will bring the produce within the reach of eastern and southern markets. The time and cost of transportation saved will be added to the profits of the farmer. For two years to come, the demand by the laborers on these great works will far exceed the supply from this State, and an advance in price a sure result. Although the farmers of St. Clair have not much engaged in castor bean and tobacco raising, yet we

doubt not that in the foregoing suggestions preparatory to the home markets which will spring up in our midst, from the railroads about to be constructed, many of our readers may take some useful hints.—*Illinois Repub.*

Paint for Buildings.

We are far from supposing that our ideas will exactly agree with those which have of late been regarded as most orthodox; but in matters of taste we may hope to be excused for entertaining preferences a little out of the beaten track. Variety is said to be the spice of life, and why may not a manifestation of striking dissimilarities of taste, as to the modes of ornamenting our places of residence, be considered, on the whole, altogether preferable to the dull monotony of uniformity?—Thomas Paine, who said some excellent things, as well as some very foolish things, could not help smiling at the conceit of what a drab-colored creation this would have been, if God had been a Quaker. But we should be grieved at the conceit of what a creation this would have been, if God had left out that excellent class of Christians. The fact is, it takes everything to make world, and in this country we are in favor of the 'largest liberty,' especially in matters of taste and opinion.

We are not not so inveterately utilitarian, as to wish to sacrifice all that is ornamental for the sake of durability; and yet, when about to paint a dwelling, or any other building, due attention should be paid to this matter. And it is well known, that white lead, whether mixed with other colors or used by itself, is the least durable of any of the colors commonly used for such purposes. Nevertheless, for country houses, more or less of it is indispensable.

We venture to assert, what many are beginning to be sensible of, that the dark colors, which, for a few years past have been quite fashionable, will ere long be repudiated. We have heard much said in favor of subdued or neutral colors, and for certain kinds of buildings they are well enough. But we confess that it transcends our limited powers of discernment altogether, to discover in these miserable drabs and umber colors which have been so extensively recommended, anything to please the eye or gratify the taste. They contrast badly with the foliage in the vernal seasons, and at any and all times give a somber and cheerless aspect to the scenery. Nor are we prepared to decide in favor of the unmitigated white, with green blinds, which for years was the distinguishing characteristic of all country houses of any considerable pretensions. Still, white lead is, and will be continue to be, the principle ingredient in paint for buildings in the rural districts.

For a dwelling-house in a favorable locali-

THE FAMILY CIRCLE.

This department will be conducted by
Mrs. MARY ABBOTT.

Confidence between Mothers and Children.

Mothers, strive to cultivate a spirit of confidence in your children, especially in your daughters. Commence with your children in their infancy. When they are in pain and suffering show them by your *voice* and *looks* that you sympathize with them. When they are sprightly and happy then let them see by your smiles that you are pleased. A child at a few months old will understand its mother's look and voice, and as it grows older it will watch your looks and listen to your voice, and its happiness will be affected by it. If you smile it will smile; if you look stern it will look sad and grieved. Thus you see how much their happiness is entrusted to your care. And as they grow older strive to gain their utmost confidence; show them that you are interested in whatever interests them, no matter how trivial the matter may be. In their school days let them see that you are pleased when they make efforts to advance in their studies. When they are successful let them understand that it makes you happy. When they appear fretted find out the cause of their troubles, and if they have done wrong, give the advice and correction they need, but let it be in a kind and gentle manner. If they have suffered wrong show them that you feel truly sorry for them, and teach them that it is better to suffer wrong than to do wrong. Do not treat your children in the harsh manner we knew a mother to treat her children. When her little ones were punished at school, she would whip them at home. By this means her children lost all confidence in her, and would hide and keep everything a secret from her, and when the son wanted to go away he was sure not to let the mother know of his plans. And the daughter, marrying without the advice or consent of her parents. It is of the greatest importance that the daughter should have implicit confidence in her mother, letting her know all her hopes, her joys, and her fears. Mothers, in no case be cold or repulsive; you may cause your daughter many a heart-ache,

and entirely lose her confidence, and you know not what evil may result from it.


Try to make your children *love your society* better than any other, by conversing on subjects congenial to their minds, and within their understanding, patiently answering their questions, however simple they may appear to you. *Do not turn them off with a short answer.* We know that it costs much self-denial on the part of the mother, but what will not a mother do for the future well being of her children? We will illustrate what we have been writing by relating the questions our little daughter put to us just now as we laid down our pen for a minute:

'Mother, do you think it is time for me to undress my dolls?'

'Yes, my dear, I think it is, 'Children should go to bed early.'

We said this, as we always do without a smile. Children do not like to be trifled with. She then held up a piece of calico and asked, 'Is this large enough to make my doll a dress?' We looked at it, and said we thought it would be quite large enough, and would make a fine dress. She seemed pleased. She will be sure to ask more important questions as she grows older.

A pious, judicious mother, if she gains the entire confidence of her children, may be almost sure of their future welfare.

 We have received some choice plants and evergreens from Dr. Kennicott, with which we were very much pleased. Some of the kinds we had been trying to get for some time, but had not obtained them. The flowering-almond, the lilly and the lilac are great favorites of ours. The peonys, the roses, and all the plants are fine varieties. As soon as they were brought to the house we helped with our own hands to set them out for fear of losing them. We were so much pleased with them that we never spent two hours in more pleasant employment. They have nearly all lived and are growing finely. We feel truly thankful to the Dr. for sending them.

We expect soon to take an excursion into the country, and when we return we hope to have much that is interesting to write about the flowers.

PHYSICAL EDUCATION.—Mrs. Jones has been lecturing here on this subject; and has stirred up the minds of many mothers in regard to the physical education of their children. We think it is an important subject and one that parents should certainly pay attention to. We only copy a line or two in regard to sending children to school: 'Children should not be sent to school before they are six or seven years old, nor be confined more than an hour at a time.'

Too much attention cannot be paid to the physical development of children. That they may acquire a good constitution, the foundation must be laid while young, for their own comfort depends on it and the health of the future generation. The children cannot be healthy unless the parents are well, and as there is so much of constitutional disease at the present day, we hope parents will think more of the cause of it, and strive to remedy it as much as they can. We shall not have time nor room to write more on this subject this month, but we hope this much will awaken up an interest on the importance of the physical education of children.

CHEMICAL SOAP.—The soap which Mr. Woodman sent us we should have noticed in our last number, but ill health prevented us from trying it ourself. We trusted it to a 'help' who did not understand how to use it, and who did not succeed very well with it; but we have tried it and can say with truth—if used rightly it will save half the labor of washing. To those who do their own work it will be economy to use it, and those who do not, if they are able and willing to attend to it themselves, will find it labor-saving and economical, but if left to servants without overseeing it is wasteful to use it, as they will use more of that kind of soap without doing any more washing.

☞ Mrs. Whittlesey's Magazine, the Student, the Youth's Companion, and the Family Visitor we regularly receive, and they are welcome visitors.

PURITY.—I would have you attend to the full significance and extent of the word holy. It is not abstinence from outward deeds of profligacy alone—it is not a mere recoil from impurity in action. It is a recoil from impurity in thought; it is that quick and sensitive delicacy to which even the conception of evil is offensive; it is a virtue which has its resi-

dence within, which takes guardianship of the heart, as a citadel or inviolated sanctuary, in which no wrong or worthless imagination is permitted to dwell. It is not purity of action that is all we contend for, it is exalted purity of the third heaven; and if it is at once settled in the heart, it brings the peace, and the triumph, and untroubled serenity of heaven along with it. In the maintenance of this, there is a constant elevation; there is the complacency, I had almost said the pride, of a great moral victory over the infirmities of an earthly and accursed nature, there is a health and a harmony in the soul, a beauty of holiness which, though it effloresces in the countenance and the outward path, is itself so thoroughly internal as to make purity of heart the most distinctive guidance of character that is ripening and expanding for the glories of eternity.—*Thomas Chalmers, D. D.*

Cleaning Houses.

As this is about the season when good housewives clean their houses from cellar to garret, it may be well to say a few words on the subject. When you wash paint, don't use soft soap and warm water, for that will take off the paint as well as the dirt. Use cold water and hard soap. Scrub the floors with soap, and don't put down the carpets until the floor is perfectly dry.

Always put down some fine, clean (mind clean) straw under the carpet, and lay it smooth and level. Carpets may be cleaned by pounding them in strong soap suds and washing them well out of the suds. The suds must be very strong and cold. This is done by cutting down the hard soap and dissolving it in warm water. The suds feel slippery between the fingers. Bedsteads should receive a complete scrubbing with soap and water, and should not be put up until perfectly dry. The seams and holes should then be annointed with corrosive sublimate dissolved in alcohol or sulphur mixed with camphine, or a solution of the chloride of zinc.

No person should go to sleep in a damp bedroom. Many people by overlooking this caution during house cleaning season, catch severe colds, and make their beds with the clods of the valley before the subsequent Christmas.—Always commence to clean at the top of the house, and descend by steady and regular stages. Some people clean their houses with quietness and scarce any disorder; others do not do any more work, but make a great deal of noise. If there is a dog or cat about the house, it generally disappears till the squall is over. The grand rule for facilitating work, is system. Arrange all the work to be done, before commencing. For want of system, many a job has to be done over and over again.—*Scientific American.*

From Harper's New Monthly Magazine.

Who Knew Best?

[CONCLUDED.]

Master Heinzelmänn appeared to be totally changed. He troubled himself no longer about his business, but left every thing to his workmen. Every morning early, he left home to fulfill his new vocation as leader of the people, and to labor for their happiness. He saw not that his own happiness was going to ruin in the meantime. He used to return homelate, worn out, weary, and hoarse with much speechifying and shouting, and ill-tempered into the bargain. Scarcely had he exchanged a few sulky words with his poor wife than he betook himself to bed. He rarely saw his children; the pleasant evenings in the front-room had vanished as a dream; and could not be recalled. Instead of merry laughter and joyful cries, and glad shoutings, there was nothing to be heard but the low, sad sobs of Frau Margaret. Peace and contentment seemed to have fled from the house, as well as from the hearts of all its inmates. Yes—all! for to confess the truth, Master Baptist Heinzelmänn found, little by little, that although his new life in the busy current of politics brought plenty of excitement, it by no means brings contentment, and instead of making him happy, it laid upon him rather a burden of cares, vexations, hardships, and losses of many kinds. At first it went well enough—but how it went afterward? His party, which in truth was not a small one, listened to him right willingly when he held forth and displayed his political knowledge, but they had no objection to a cool drink now and then between the fiery speeches. So Master Baptist, from time to time, in order to keep up his popularity, was obliged to let a cask of ale go the rounds, and that was not quite so pleasant to him as to be listened to with attention, and to hear the hurrahs when he said something a little more violent than usual. Besides there were other leaders of the people as well as he, who stood in high favor with the mob, but who had very little money, while Master Heinzelmänn was well-to-do, and could afford to offer a sacrifice, on the altar of his country, and—he offered it. Only, somehow or other the sacrifice was wanted so often, and that was not much to the liking of the Tischlesmeister. In the end—and that worried him the most—his journeymen became refractory all of a sudden? They wished also to have property of their own, and demanded higher wages. Baptist Heinzelmänn liked revolutions very well, but not against himself, and so he told all his hands to go to Jericho, and for a time his business went to sleep. From this it happened that orders did not come in quite so numerously as before, which puzzled Baptist not a little. He began

to turn it over in his mind, and all at once he bethought himself of what his good-hearted wife had said to him one day: 'Remember! the skin is nearer than the fleece.' Never had the truth of this proverb come so strikingly and forcibly, as now that his delusions were losing their strength. A singular and irresistible longing to return once more to his former tranquil and retired, and yet happy life, overcame him. What was the selfish love of the mob, against the pure and true love of the wife and children? a painted bubble in comparison with a bright and costly jewel. Baptist Heinzelmänn plucked up a heart; towards evening he left the council-house and went home. No one was in the garden; it lay there in deep stillness. He stole down a by-path to his work shop, where now but three hands were employed out of the dozen that formerly worked therein, and threw off his Sunday clothes, put on his old dear comfortable jacket, his cap on his head, reached down the clay pipe which had had such a long rest, lit it, and then went softly through the inner to the outer room. Wife and children sat, as often before, on the threshold, not lively as they used to be, but particularly quiet and downcast—even merry Fritz had scarcely a word to say for himself. The sun was dropping down to his setting, and cast golden streams of light through the thick foliage of the vine which enwreathed the door and window, down upon the clean boards of the floor. Sweet odors are borne in on the air from the garden, the birds chirped and twittered their last evening notes, and peace and tranquillity reigned around, except in the hearts which once knew nothing else than joy and contentment.

Heinzelmänn leant over the door, and for a time looked at his family in silence. The past came before his mind as pleasant pictures. 'What a fool was I!' he said inwardly to himself; 'what more blessed happiness can there be, than the happiness in the circle of one's own family! What a fool was I, not to see this long ago: that I could be so long blinded by stupid vanity and foolish pride! But there is yet time, and I will not let it escape.'

'Margaret,' he said aloud, and with friendly voice.

'Baptist—is that you? and so early!' she cried and sprang up; and 'and what do I see? in the old cap and jacket! Are you not going out again?'

'Not to-day, nor to-morrow, nor afterwards,' answered he, smiling. 'With the old dress, I have again found my old heart. The skin is nearer than the fleece, my Margaret, my good, dear wife!'

'Oh, goodness!' she exclaimed, 'what do you say? what do I hear? am I not in a dream?'

'If you are dreaming that the old contentment has come back again,' replied Baptist,

'then is your dream a true one. I have grown wise at last, Margaret.'

'Thank God!' stammered the Frau; 'and instead of handling the pen, you will now work with the plane—will you?'

'Yes, Margaret, stick to that which I know, and leave it to others to bungle at politics. In short, I have given up my post—am no longer town-councillor. I am now only what I was before—Tischlermeister Baptist Heinzelmänn! Am I welcome to you as such?'

With a shriek of delight, Frau Margaret fell into her husband's open arms. Long and close was their embrace, and the sense of newly quickened joy brought sweet tears from the wife's heart. The children understood not what was going on; but their father was glad and contented, and they were glad and contented too. Until late at night, they sat together in the garden, rejoicing in their new-found happiness.

Baptist became truly the Tischlermeister of former days, and suffered himself to be no more drawn into temptation. A burnt child shuns the fire; and he knew now the difference between family joys and worldly joys. His late friends and companions came entreating him to take part once more in their proceedings, but Baptist put them off with a laugh, and answered, 'Not so, dear friends—the skin is nearer than the fleece! In-doors there, at the work-bench, is my post. Other people understand politics and government better than I—I leave the task to them.'

The friends and companions tried again two or three times—Heinzelmänn, however, remained firm; they gave up and came no more. But the old customers returned, and the old journeymen also, who had thought better of their strike—and above all, the old joy of tranquil, domestic life.

Baptist would not change with any one. And Frau Margaret?—only go by the house some day towards evening, when she is playing with the children, or sitting with them and her husband in the garden; then, when you hear her clear silvery laugh; then, I can believe, you will no more ask if she is happy. Such a laugh can only from a truly happy heart.

TO CLEAN WOOLEN AND SHAWLS.—Pare and grate raw, mealy potatoes, and put to each pint of the potato pulp, a couple of quarts of cold water. Let it stand five hours, then strain the water through a sieve, and rub as much of the potato pulp as possible—let the strained water stand to settle again—when very clear, turn the water off from the dregs carefully. Put a clean white cotton sheet on a perfectly clean table, lay on the shawl which you wish to clean, and pin it down tight. Dip a sponge that has never been used, into the potato wa-

ter, and rub the shawl with it till clean; then rinse the shawl in clear water, with a tea-cup of salt to a pail full of water. Spread it on a clean, level place, where it will dry quick—if hung up to dry, the colors are apt to run, and make the shawl streaked. Fold it up while damp, and let it remain half an hour, then put it in a mangle—if you have not one, wrap it in a clean white cloth, and put it under weight and let it remain till dry. If there are any grease spots on the shawl, they should be extracted before the shawl is washed.

ASSISTANCE IN ACCIDENTS.—We digest for the benefit of readers, especially in country places, the course to be adopted in emergencies like the following:

In case of a fractured or dislocated limb, let the sufferer lay on the ground until a couch, door, gate or plank can be procured, for in raising him up he may die from faintness or loss of blood. When procured, place the door or gate along side of him, cover it with something soft, and let men convey him steadily home, but do not put him into a vehicle of any kind.

In fits.—If a person fall in one, let him remain on the ground, provided his face be pale, for should it be a fainting or temporary suspension of the heart's action, you may cause death by raising him upright or bleeding; but if the face be red or drak colored; raise him on his seat, throw cold water on his head immediately, and send for a surgeon and get a vein opened, or fatal pressure on the brain may ensue.

In Hanging or Drowning, expose the chest as quickly as possible and throw ice water over it, whilst the body is kept in a sitting position.

Children in Convulsions.—Deluge the head with cold water and put the feet in warm water, till Medical aid can be procured.

Poison.—Give an emetic of a teaspoonful of mustard flour in a teaspoonful of warm water every ten minutes, till vomiting ensue or medical assistance is obtained.

Burns and Scalds.—Let the burnt part be bathed in a mixture of turpentine and olive oil, or linseed oil, equal parts, till the pain abates; then dress it with a common cerate, and defend it from the air.—*N. Y. Farmer and Mechanic.*

BEAUTIFUL FIGURE.—An Indian chieftain, during the early settlement of New England invited a minister to settle as a missionary among the tribe, and to induce him to do so, the Sagamore said—'You shall be to us as one who stands by a running water, filling many vessels.'

THRESHERS.—We call attention to the advertisement of Wheeler, Melick & Co. of their Horse Power Threshers and Cleaners. We have now a good supply of these machines on hand, and shall be happy to serve all who may wish for them. We will be at Rocheport, Columbia, Booneville and Glasgow between the 1st and 15th of June where we shall be happy to give information to any persons who may desire to know about them. We will be heard of in Rocheport at Gustavus Elgin's, at Columbia at Col Switzer's, at Booneville at Johnson & Brown's or J. W. Harper's, and at Glasgow at Capt. Cleveland's or J. W. Brown's. Possibly we may also visit Fayette, Georgetown and Brunswick.

WHAT CAUSES THE POTATO ROT.—We have before us a long letter from an aged man residing in the western part this State, who says he has lived in all the country, from the Blue Ridge to his present residence, and he has never yet seen the rot in his potatoes. He thinks the fault is too high manuring, and shallow plowing, that the surface is poisoned in various ways, but if will you plow deep enough to turn this poisoned earth completely below the reach of the root of the potato, you will have no rot. He says if the earth twenty feet below the surface is turned up and exposed to heat, light and air, it will soon become productive. Is there not wisdom in these things?

ARMY WORM.—Our country friends inform us that this kind of worm are destroying most of the crops now growing in this section of country. The grass, naturally destroyed by them. The main cause oats, corn, are all in many places, of their ravages, we attribute to the very wet weather we have had lately. These worms begin at the top of the grain and cut it as they go down to the roots. The injury they are now doing is incalculable, and unless they soon cease their havoc, they will destroy all prospects of harvest in this section of country.—Union.

Fine sensibilities are like woodbines, delightful luxuries of beauty to twine round a solid, upright stem of understanding, but very poor things if, unsustained by strength, they are left to creep along the ground.

ST. LOUIS MARKET—WHOLESALE.

VALLEY FARMER OFFICE; May 27, 1882.

H EMP—per ton, \$70 to \$78. Inactive.
 FLOUR—per bbl., \$3.50 to \$4.00.
 WHEAT—per bushel, 60 to 80 cents.
 CORN—per bushel, 36 to 40 cents.
 OATS—per bushel, 27 to 30 cents.
 BARLEY—per bushel, 30 to 35 cents.
 MESS PORK—per bbl., \$16.25 to \$16.75.
 PICKLED HAM—per lb., 5 1-2 cents.
 LARD—per lb., No. 1, 9 to 10 cents.
 BULK MEAT—per lb., 6 3-4 to 7 1-4 cents.
 SUGAR—per lb., common, 4 3-4 to 5 cents.
 MOLASSES—per gallon, 29 to 30 cents.
 COFFEE—per lb., Rio, 9 to 10 cents.
 SALT—per sack, \$1.15 to \$1.30.
 PIG IRON—per ton, cold blast, \$24.
 HAY—per hundred, Timothy, 45 to 55 cents.
 TOBACCO—per cwt., \$3.75 to \$4.95.
 BEANS—per bushel, prime white, \$3.25 to \$3.50.
 POTATOES—per bushel, 80 to 90 cents.
 BUTTER AND CHEESE—Fair country butter, 9 to 10c; good to prime, 14 to 16c; choice Ohio roll, 18 to 22c. W. R. cheese 7 1-4 to 7 1-2c for prime.
 SEED—clover, per bushel \$4 50 to \$5 Flaxseed \$1 to \$1-10; Timothy \$ per 2 bushel; Osage Orange; per bushel \$20.

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